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THE DAHLIA BLUE BOOK

For 1959

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U. S. Department of Agriculture



ROCKY RIVER
DAHLIA
GARDENS

13089 EAST RIVER ROAD
COLUMBIA STATION, OHIO, U. S. A.

Greetings



E. J. WIND

LOCATION

Rocky River Dahlia Gardens are located $\frac{1}{2}$ mile north of the intersection of Ohio state routes 82 and 252. This is about 20 miles southwest of Cleveland. Route 82 crosses all numbered highways south from Cleveland. Route 252 crosses all numbered routes west from Cleveland. Make it a point to visit us at any time of the year. Visitors are always welcome.



Entrance to Rocky River Dahlia Gardens

General Information

PLEASE READ CAREFULLY

ORDER EARLY

Early orders have first call on varieties which are in limited supply. Also the earlier you order the more likely that your order will be shipped at the time you request. During the heaviest shipping periods, more orders are booked for shipment on specified days, than can possibly be handled on those days, so they are shipped in the order in which they are received.

DEPOSITS

No deposit required. Just send in your order. Pay anytime before shipping date.

PLANT ORDERS

Plant orders are booked for shipment on the date specified by the purchaser. Shipments will be made as nearly on time as possible, subject to priority in ordering and other factors beyond our control, such as: the failure of a variety to produce cuttings early or in the quantity normally expected, inability to "harden off" plants out-of-doors preparatory to shipment because of severe weather, freezing temperatures at time shipment should be made, periods of heavy rains which slow up gathering of orders from the cold frames and the actual packing of the wet plants and saturated soil, strikes or threatened strikes affecting transportation or materials required in packing the orders. Kindly bear these factors in mind if your order does not reach you when expected, and rest assured we will do our utmost to get your order to you as promptly as conditions will allow.

BACK ORDERS

Sometimes part of your order may be shipped at one time and the balance later when the plants become available. In the event we are unable to complete the order a refund will be made by check (stamps in amounts of less than one dollar) at a later date. During the heavy shipping season there may be a delay of as much as four or five weeks in the mailing of refunds. No credits are carried over from one year to another. If your refund has not been received by July 1st, notify us and the matter will be given prompt attention.

POSTAGE

We pay the regular postage on retail orders, except foreign, of \$5.00 or more. On orders of less than \$5.00, add fifty cents for postage and packing. Purchaser pays all special charges such as air mail, special delivery, etc. All wholesale orders are F.O.B. Columbia Station.

CONDITIONS OF SALE

All roots shipped from our nursery are guaranteed to be true to name and in growing condition upon arrival. Stock failing to meet these conditions must be reported to us as soon as the failure becomes apparent, if replacement is desired. Because of many conditions beyond our control, we can not be held responsible for growing failures once the stock has been planted.

REPLACEMENTS

Plants received in poor condition will not be replaced unless special delivery, or special handling, postage was included with payment. Add forty-five cents for special delivery, or if you do not have special delivery service from your post-office, add thirty-five cents for special handling. If plants are not received in growing condition, a "bad condition" report must be obtained from your post office, and forwarded to us, if replacement is to be in order. If express shipments are received in damaged condition thru frost or careless handling, it should be reported to your express agent at once and a claim filed.

SUBSTITUTION

We never substitute one variety for another unless specifically requested to do so. If you have second or third choices you may list them on the order.

EXPORTS

Customers in other countries should obtain import permits from their departments of agriculture and the necessary information regarding importation into their country. If no permit is required that fact should be stated on the order.

SALES TAX

Residents of Ohio must include the three per cent sales tax with remittance.

TELEPHONE

BEImont 6-3387 (Columbia Station)

ABBREVIATIONS

The letters immediately following the name of a variety are the key to the classification of that variety. The 1959 BLUE BOOK classifications are based on the joint, revised classification by the Central States Dahlia Society and The American Dahlia Society, but can not be regarded as official as changes will be made after this is written. We believe it will be found to be substantially correct.

First letter in the classification code following the name of the variety indicates the size; the second letter indicates the type; the third one indicates the color. As an example, A-FD-W would mean the variety was a large variety normally growing over eight inches in diameter, formal decorative in type, white in color. See under "classification" on next page for full key.

Following the classification code is the name of the grower (in parenthesis) who introduced the variety. In the case of more recent introductions the name of the originator is also given and separated from the name of the introducer by a hyphen as (Wolbert-Rocky River) which indicates Mr. Wolbert was the originator of the variety and it was introduced by us. In the case of foreign introductions, which are indicated by an asterisk (*) the originator and introducer may be unknown or vague.

CLASSIFICATION

Size

A—Large (Exhibition), over 8 inches
B—Medium (Cut Flower), 6 to 8 inches
EB—Small medium, 4 to 6 inches

Ba—Ball, 4 inches or over

M—Miniature, under 4 inches (Miniature Ball, 2 to 4 inches).

Pom—Pompon (for exhibition purposes must be under 2 inches in diameter)

Type of Flower

An—Anemone

Ba—Ball

C—Cactus

Coll—Collarette

FD—Formal Decorative

IC—Incurved Cactus

ID—Informal Decorative

Mig—Mignon

O—Orchid Flowering

P—Peony

Pom—Pompon

S—Single

SC—Semi-Cactus

St.C—Straight Cactus

Color

Au—Autumn

Bi—Bi-Color

Blend { Lt. Bl—Light Blend
Dk. Bl—Dark Blend

L—Lavender

Or—Orange

Pk—Pink

Pr—Purple

Red { Dk. R—Dark Red
R—Red

Var—Variegated

W—White

Y—Yellow

Fl—Flame



Dahlia Green Plants

Dahlia "green plants" or simply "plants" as we refer to them in this book are little dahlia plants grown from cuttings. The cuttings are taken from selected clumps which are started into growth in the greenhouses during the late winter months. As soon as the sprouts are long enough to handle, they are taken off and placed in a special rooting medium. When the cuttings are rooted they are potted into three inch pots in a soil selected, or prepared to hold together in shipment.

After potting, our plants are carefully grown and constantly watched to insure plants of highest quality. At just the right time they are moved from the greenhouses into cold frames for the extremely important and exacting "hardening" process.

Our plants are shipped to all parts of the country in paper shipping pots, carefully packed to insure safe arrival. (See the paragraph on plants under "CULTURAL HINTS" in the back of this book).

Properly grown plants produce flowers as early as flowers are produced from roots. As a rule the flowers from plants are superior. Growth, and total productivity of bloom, are equal to bushes grown from roots. Good clumps are formed for carrying the variety over winter. Plants are sold cheaper, not because of any difference in their worth, but because of use of careful propagation methods we are able to produce several plants from one root.



Rooted Cuttings

Left, rooted cutting with roots wrapped in damp sphagnum moss for shipping. Center, three inch pot. Right, rooted cutting ready for potting.

Altho we do not recommend the purchase of rooted cuttings by any who have had no previous experience with them, except on a trial at purchaser's own risk, we will furnish high grade, well rooted cuttings of varieties which are listed in plants in this book. Prices are two thirds ($\frac{2}{3}$) of the price of a plant of that same variety. Rooted cuttings are guaranteed to reach the purchaser in growing condition if sent by "special delivery" or "special handling" parcel post, but we can not assume responsibility for loss of the cuttings once they have been received in good condition.

When cuttings are received they should be planted at once and watered well. For the first two or three days they should be protected from direct sunlight and draughts. By the end of that time, the roots will have started to establish themselves in the soil, and a gradual exposure to sun and normal growing conditions should be made. Rooted cuttings do require some attention for the first few days, but once past that stage they will develop into fine plants with gratifying results.

Rooted cuttings may be obtained four to six weeks before time to plant in the garden, planted in pots or plant bands and grown into good sized, strong plants by the time to plant outside. Or, as some prefer, they may be purchased for delivery a week or ten days before intended planting in the garden, gradually hardened to outside conditions and then set right into the garden as one would any other unpotted plant. This method requires a little more attention to details of conditioning the cuttings, but has the advantage of better and straighter roots when the clumps are dug the next fall.

Pot Roots

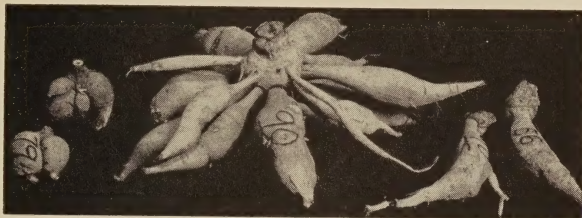
Pot roots are tiny clumps, or individual roots, which have been grown in three inch pots. As a planting unit, they are planted, and perform, similarly to roots, but at a lower initial cost. For propagating, they are excellent for producing a few cuttings, usually more rapidly than a fully matured field grown root. They are especially suited for early Southern plantings as they are available at any time. We suggest Southern growers who have been using plants try them to avoid the disappointments sometimes experienced because plants can not be produced early enough for very early planting. They are also ideal for others who have not had full success in producing good clumps from plants. It will be well to remember, when first buying pot roots, that in spite of their meager size, they have vigor and vitality which often surpasses that of field grown roots. Invariably, they produce a better clump of roots the following fall than do field grown roots, especially if the latter are large when planted. Like field grown roots, they are less subject to stem and crown rots in winter storage than are clumps produced by green plants.

Clumps

Clumps are the entire group of roots attached to one plant as dug in the fall. For those who prefer to purchase clumps for fall delivery, and are willing to assume the responsibility of carrying them over winter, we supply the finest clumps that can be had, at a saving over what the roots on that clump would cost in the spring. Our list of clump prices is available in early fall, but only to those who send in a special request for it, and those who bought clumps from us the previous fall. Clump orders must be in our hands in time for the clumps to be shipped before December 15th.

Roots

Roots referred to in this catalog, are what sometimes are called "tubers," "toes," "potatoes" etc., but which are actually (botanically) enlarged fleshy roots. A root is a division from a clump, with a portion of the crown (base of stalk) attached, on which there is one live eye, or sprout. Should the root you wish to plant have more than a single eye it is advisable that the extra eyes be cut out, as each eye produces an independent plant. Planting two eyes in one hill would result in two plants growing where there should be but one.



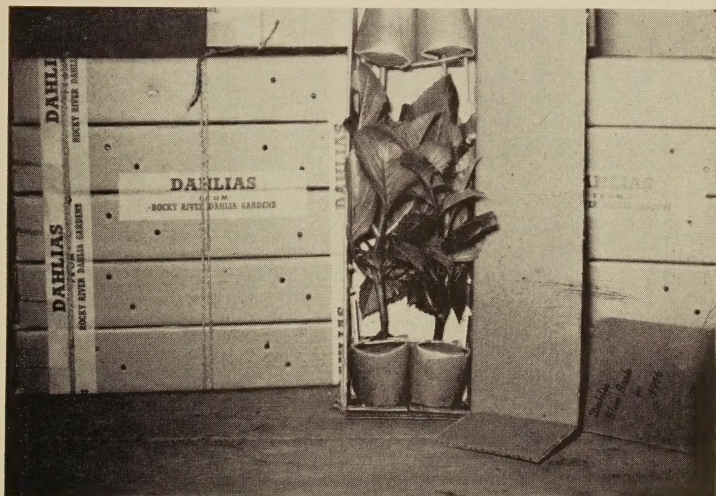
POT ROOTS

CLUMP

ROOTS

Wholesale

While our business is primarily selling to the home gardener we will sell wholesale to bona fide commercial growers or dealers if our stocks permit. Those wishing to obtain wholesale quotations must apply on their letterhead showing them to be engaged in a commercial horticultural pursuit.



Plants packaged for shipment

ROCKY RIVER INTRODUCTIONS

Our introductions are selected only after they have been grown in our seedling trial plot for at least one year. During that year they were carefully observed and notes were made on their performance with special emphasis on their weaknesses. If a variety appears to have the qualifications necessary for successful introduction, we grow it again and during that year it is entered at shows, and Trial Grounds, and visitor reaction observed. It is then, that final determination is made as to whether it is to be introduced. At the end of two years we are thoroughly familiar with the varieties we offer for introduction.



AUTUMN CHARM



CHAPPIE

AUTUMN CHARM (LaMotte-Rocky River) A light autumn formal of good form and attractive color. 8 to 12 inch wiry stems hold most blooms facing the side. Freely branching plants. A very prolific bloomer, a dahlia with real charm. Scored 85 at both Cincinnati and East Lansing Trial Grounds. Size $7\frac{1}{2} \times 4$.

Root \$10.00 net, Plant \$3.50 net

CHAPPIE (Brown-Rocky River) A well formed, light blend, semi cactus of pink and yellow. One of the last seedlings sent to us by the late Prof. C. Merrill Brown. Visitors to our gardens have been waiting for the release of this one. Recommended for re-trial at the Trial Grounds. Size $7\frac{1}{2} \times 4$.

Root \$10.00 net, Plant \$3.50 net

GIFT CERTIFICATES

Give a gift certificate for dahlias for Christmas, anniversaries, or as a "Thank You" for favors. Certificates may be for specified varieties, or for a specified value. Your friends will appreciate them.

DISEASE

We, at Rocky River, were commercial pioneers in the eradication of dahlia disease under the guidance of noted pathologists from the U. S. Dept. of Agriculture and the Ohio Experiment Station; your assurance of better results.

ROCKY RIVER INTRODUCTIONS



CLARIAM TEMPO



DOTTIE D

CLARIAM TEMPO (Wolbert-Rocky River) An incurved cactus of a new shade of scarlet-orange. Beautifully formed flowers, with tightly rolled petals, have great depth. This could prove to be the most popular of a large family of CLARIAM originations. Blooms average about 8½ to 9 inches in diameter. It scored 85 at Long Island, East Lansing, Cincinnati, and 85.4 at Atlanta. Size 8¼x5.

Root \$15.00 net, Plant \$5.00 net

DOTTIE D. (Chamberlayne-Rocky River) Here is a big, dark blend, ball dahlia of unexcelled quality, with fully rounded, quilled petals. The color is a light lavender overlaid purple. Sturdy plants start blooming early. Blooms average about 6 inches in diameter with outer petals rolling well back to the stem. Winner of the American Home Achievement Metal at Cleveland, where five judges gave it an average score of 87.7, winning over a strong class of seedlings. Certified at Long Island (85.5) and Cincinnati (85). A truly valuable addition to the ball class. Size 6x4.

Root \$7.50 net, Plant \$2.00 net

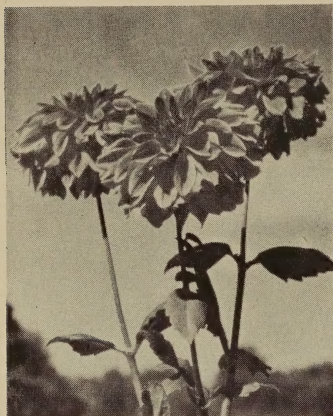
KODACHROME SLIDES

35-mm kodachrome slides of our 1959 introductions are available to interested groups. We can also supply sets of about sixty slides of recent and standard varieties, along with related scenes, arrangements, etc. There is no charge to responsible groups but bookings are subject to prior call upon them.

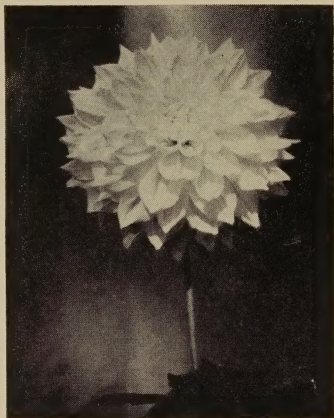
RED SPIDER CONTROL

The common "red spider" becomes an increasingly serious pest of dahlias especially when DDT is used for the control of other pests. Growers should familiarize themselves with the first evidence of the presence of "red spider" and take immediate steps to control it. Safe, effective means are available (see pages 13 and 63).

ROCKY RIVER INTRODUCTIONS



ELEANOR BOLESWORTH



ESTHER BLANCHE

ELEANOR BOLESWORTH (Harter-Rocky River) A cherry, early, free blooming formal of sulphur yellow heavily flushed spectrum red. The ball shaped flowers are held at 45 degree angle and facing up on good strong stems. A good cut-flower. It scored 85.3 at East Lansing. Size 5x3.

Root \$5.00 net, Plant \$2.00 net

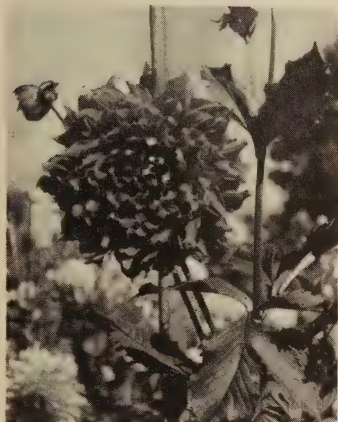
ESTHER BLANCHE (Baynes-Rocky River) We consider this to be the best large, white formal we have grown. Petals have very good substance. Blooms face side and 45 degree angle on rigid stems. Heavy, well proportioned, dark green foliage. Originated in Australia by the originator of VERA SEYFANG, which we introduced last year. Size 10½x5.

Plant \$5.00 net, Rooted Cuttings 5 for \$15.00 net

Air Mail Shipments

Regular parcel post with special delivery, or special handling, (see "Postage" on page 2) is relatively safe to the extent that we guarantee delivery of plants in good condition. However, if plants are requested to be sent air mail we will gladly do so, providing air mail charges accompany remittance for the order. Check with your post office for cost from the Cleveland zone. Weight of shipments may be figured on the basis of 2¾ pounds for four plants.

ROCKY RIVER INTRODUCTIONS



LOIS LUNDGREN



MINNEHAHA

LOIS LUNDGREN (Lundgren-Rocky River) Reddish purple semi-cactus of more than usual depth for blooms in the 8 inch range. Occasional blooms tipped white. Tall grower. Certified at Atlanta (85.2) and at Oakland in 1956 (85). Size 8x4. **Root \$10.00 net, Plant \$3.50 net**

MINNEHAHA (Rocky River) The 8 inch lilac colored blooms appear almost artificial in their perfection of form. Blooms have a depth of 4 to 6 inches. Stems are long, holding the blooms well above the open growing plants. Early and prolific bloomer. Scored 85 at East Lansing and 85.4 at Cincinnati. Size 8x4½.

Root \$10.00 net, Plant \$3.50 net

Midwest Dahlia Show

This great show, which always attracts visitors from all parts of the country, will be held in Pittsburgh on September 12th and 13th. Headquarters will be at the Penn Sheraton Hotel.

Visitors to the Midwest show from points west, and travelling the Ohio Turnpike, will find that a stop-over at Rocky River Dahlia Gardens to be convenient. We are located about 3 miles south of the Turnpike on route No. 252, about half way between exits No. 9 and No. 10. From the west leave the Turnpike at exit No. 9 and re-enter at No. 10 with a loss of travel distance of about five miles in non-congested traffic.

ROCKY RIVER INTRODUCTIONS



MISS DOT



ORANGE DOT

MISS DOT (Haugh-Rocky River) A well-formed, autumn colored, miniature formal decorative averaging about 3 inches in diameter. Most blooms face side or 45 degree angle. Excellent producer of uniformly good blooms. Scored 85 at East Lansing. Size $3 \times 1\frac{1}{2}$.

Root \$3.00 net, Plant \$1.50 net

ORANGE DOT (Haugh-Rocky River) A good companion flower for MISS DOT, being about the same size, but of an orange color with the tips of the petals slightly notched. Size $3 \times 1\frac{1}{2}$.

Root \$3.00 net, Plant \$1.50 net

HOW TO HANDLE CUT DAHLIAS SO THEY WILL KEEP

The life of dahlia blooms, after they are cut, may be very much prolonged by a few simple precautions.

First of all, cut only **FULLY MATURED** blooms. Early morning or late evening is the best time to cut altho blooms cut during the day, even when somewhat wilted, will revive. Always cut with stems longer than needed. Cut should be with a sharp knife to avoid crushing the microscopic water tubes in the stems, which supply water for the flower head.

As soon after cutting as possible, the stems should be put in water and a fresh cut made under water. Tests have shown warm water to be better than ice water, and that two or three inches of water is all that is needed. Blooms that are badly wilted when cut, or those which have wilted after cutting, can usually be revived by fresh cuts under water. If that fails putting the stems in hot water, or even in an open flame is often successful. Flowers should be allowed to stand in the warm water for a few hours before using, and in a place where there are no drafts.

After the period of "hardening" the flowers may be used for their intended purpose. In placing them in their permanent containers it is well to again cut off a portion of the stems. In fact, this should be done each time the stem is out of water for more than a moment. Use only **CLEAN** water and **CLEAN** containers; factors which are very important but little known. The water should be changed each day and fresh cuts made of the stem. Set the containers out of direct sunlight and drafts.

Follow the foregoing suggestions and you will find the dahlia to be a long-lasting flower.

ROCKY RIVER INTRODUCTIONS



PAPE'S YELLOW



TALISMAN

PAPE'S YELLOW (Pape-Rocky River) A deep yellow cactus with laciniated petals. Very early and prolific. The flower is quite similar to the old favorite **FRAU IDA MANSFIELD**, but a larger and improved edition of that variety. It is also a better grower and better root-maker. Blooms about 8x4. Certificates of Merit at Long Island, East Lansing and Cincinnati. Size 8x4. **Root \$10.00 net, Plant \$3.50 net**

TALISMAN (Phillips-Rocky River) One of our personal favorites of the many small types we had on trial. The semi-cactus blooms are very "chick," of golden yellow with each petal delicately outlined by a thin line of cherry red. Plants are always covered with blooms of good substance and form. Size 5x3. **Root \$5.00 net, Plant \$2.00 net**

The Challenge

Dahlias, perhaps more than any other garden flower, offer a most intriguing challenge. While almost anyone can grow dahlias without particular care, it is a flower which responds to every bit of intelligently applied, sound gardening principle. The one who grows the best dahlias is the one who starts with good stock and then applies approved horticultural practices faithfully. He enjoys the mark of a superb gardener among fellow gardeners. You can get a good start with quality dahlias, free from disease, with Rocky River stock; and ultimate success if cultural hints in the back of this **DAHLIA BLUE BOOK** are followed.

New Novelties for 1959

Each year we select some of the best, new, offerings of other growers. We have seen some of those selected but depend largely upon Trial Ground reports, recommendations of friends, and the reputations of the introducers.

BERKEY (Kovar-Ruschmohr) An "A" size, incurved cactus of lemon yellow, overcast mallow pink, except at center. Blooms 9½ to 11 inches in diameter and 4½ to 6 inches in depth. Good stems hold flowers half facing to erect. Certified at three Trial Grounds.

Plant \$5.00 net

CECIL M. (Minor-Ruschmohr) A large, well formed, semi cactus of a light blend of lavender and white, with a cream center. Blooms up to eleven inches in diameter. Winner of American Home Achievement Medals at Long Island and Washington. Very attractive.

Plant \$5.00 net

CHEROKEE CHIEF (Ricks-Dahliadel) Bloom 10x6. Informal of Rose Bengal or spirea red. Petals curl and twist showing a lighter reverse. Responds to partial shade. Has possibilities as a winner in "largest bloom" class. Certificates of Merit at two Trial Grounds.

Plant \$5.00 net

FIESTA (Comstock) Blooms 11x7. Red blending to yellow; a dark blend informal decorative. Husky grower and early bloomer. Plant four feet tall. American Home Achievement Medal winner. Certified at East Lansing (85.4) and Cincinnati.

Plant \$5.00 net

GO AMERICAN (Pennypack) A large, autumn colored, semi cactus. Blooms up to 12x7. Sturdy blooms of excellent substance. Winner of American Home Achievement Medals at Chattanooga and Pikesville.

Plant \$5.00 net

KOO RIN (Kohn-Parrella) An 8x5½ straight cactus of clear, primrose yellow, from Japan. Good stems hold blooms facing. Certificate of Merit at Farmingdale.

Plant \$3.50 net

MRS. K. C. LI (Lee-Parrella) An informal decorative of Saturn red, blushed Indian yellow; general effect peach. Petals turn and twist with many petaloids giving the flower fullness. Size 11½x6 as reported by introducer.

Plant \$5.00 net

NOGATA (Nankanishi-Yoshida-Parrella) A very large, informal decorative of two shades of purple; general effect is lavender. Good canelike stems hold flowers at 45 degree angle. Size 12x7.

Plant \$5.00 net

O'DAVID (Niswonger-Rees) A 7½ inch white semi cactus seedling of Florence Chadwick displaying the same lavender tint of the parent. The lavender disappears as the blooms mature, except in late season. Blooms have good depth and good stems. Certificate of Merit at two Trial Grounds.

Plant \$3.50 net

POLLY BERGER (Dahliadel) Bloom 10x5. A formal decorative of lively Tyrian pink with slight gold tips, which gives individuality and beauty. Blooms are uniform on strong stems. Vigorous grower.

Plant \$5.00 net

RED SAILS (Dahliadel) Bloom 7½x4½. Informal of striking amber yellow, heavily tipped lively rose red. Very early and profuse. Good stems. Full centers. Certificates of Merit from two Trial Grounds.

Plant \$3.50 net

ROSEMARY J. (Kovar-Ruschmohr) A 7 to 8 inch informal decorative with a depth of 5 to 5¼ inches. The color is Rhodamine purple. Flowers half facing to erect. Certificates of Merit at three Trial Grounds. Very little competition in it's class. **Plant \$5.00 net**

SHIRLEY (Rafferty-Dahliadel) Bloom 8x5. An incurved cactus of Mimosa yellow, heavily tipped and suffused China rose. Full centers, and a most striking flower. Certified at four Trial Gronuds. **Plant \$3.50 net**

Pest Control

Continued use of a material for the control of garden pests tends to develop immunity to the material by some insects and mites. Materials, which gave excellent control at first, may lose much of their effectiveness. For that reason new materials must be developed constantly.

For the past several years new materials developed by manufacturers have been tested on dahlias by entomologist Dr. Ralph B. Neiswander of the Ohio Agricultural Experiment Station at Wooster, Ohio. In 1958 he used nine materials, or combination of materials, including four systemics. Systemics are poisons, which when applied to the soil around the plants are taken up by the plant; the plants then become toxic to pests feeding on them.

Thimet 2% (American Cynamid Co.) has given the best results of the four systemics tested the last couple of years. It may be available for home garden use in 1959. However, it should be noted that systemics were not as effective after the plants attained full size as they were earlier.

Of the five materials used as a foliar (applied to leaves) spray, a combination of Sevin 50W (Union Carbide and Chemicals Co.) and Kelthane 18.5W (Rohn and Haas) gave extremely good results. Sevin controls nearly all the pests of dahlias except mites (red spider) and Kelthane is an excellent miticide. Sevin was used at the rate of two pounds and Kelthane at the rate of one pound per 100 gallons of water.

Dr. Neiswander's test garden at Wooster contained 414 plants, divided into 46 plots of 9 plants each. Each material was tested on five different plots, separated by other plots in the garden. Systemics were applied five times during the season at twenty day intervals. Foliar sprays were applied nine times at ten day intervals.

The general appearance of the entire planting was superior to the average home garden. It is pleasing to note that the dahlia garden occupies a prominent location on the grounds and attracts a great deal of interest from visitors.



One of our fields at Columbia Station

General List of World's Best Dahlias

VARIETIES MARKED

Varieties marked with asterisk (*) are of foreign origination.

HEIGHTS

Unless otherwise mentioned in the description of the variety, the plants are of medium height.

SIZE

Size of blooms as given at the end of the description of each variety is by no means the maximum. Many of those listed as ten inch blooms have been grown twelve to thirteen inches in diameter. Size is indicated thusly: 10x6, which indicates a ten inch diameter and a depth of six inches.

ADELAIDE BB-FD-Or (Nicholson-Rocky River) A medium size formal decorative without much competition in it's class. The color is a lively orange. Petals roll completely back to the stem forming a ball shaped flower. The stems are long and graceful, holding the blooms well above the tall plants. Size 5x3. **Root \$1.50**

***ADOLPH MAYER A-SC-Dk R** This excellent variety from Holland comes nearer to being black than any dahlia in this list. The deep garnet red flowers are of good size; the petals have a velvety appearance and it keeps well when cut. Stems are ideal. A strong, freely branching plant, with dark green foliage. Abundant flowering habits. It is a fine root maker. Size 9x3. **Root \$2.00, Pot Root \$1.50, Plant \$1.00**

AGLOW A-ID-Au (Dahliadel) Warm amber yellow, heavily suffused scarlet on the center end of each petal, and with a golden sheen over all. Fine open grower producing good blooms on long, strong, stems. Size 10x4. **Root \$1.50**



ADELAIDE



ALICE MAY



ALLWAYS



AMBROSIA

ALABASTER B-FD-W (Tomczak-Parrella) A well formed white formal with good depth. Good stems hold blooms facing side above the tall, rugged plants. Size $7 \times 3\frac{1}{2}$. **Root \$1.00**

ALCAZAR A-SC-Dk R (Ballay) A nicely formed flower of good size. The color is an unusual fuchsia red with a trace of cerise. Habit of growth is excellent. Size 9×4 . **Root \$1.50**

***ALICE MAY** A-ID-W This one from Australia might well be described as a white Lord of Autumn. The blooms are large and of great depth. Stems, foliage, and substance are excellent. The low growing plant produces many fine exhibition blooms. Size 9×5 .

Root \$2.00, Pot Root \$1.50, Plant \$1.00

ALLWAYS A-StC-Pk (Phillips-Rocky River) A well formed straight cactus of empire rose with salmon at centers. Petals are well rolled and have good substance. Plants are naturally free branching, and wide spreading in growth, producing abundantly from midseason until frost. Centers remain tight throughout. A real beauty. Size 9×5 .

Root \$3.00, Pot Root \$2.25, Plant \$1.50

AMBROSIA A-SC-Au (Brown-Rocky River) A very large, light autumn color, semi cactus. Strong stiff stems hold the flowers facing to a forty five degree angle. The plants are very robust and taller than the average. A mid-season variety which has possibilities for "large-bloom" honors. Size 11×6 .

Root \$10.00, Pot Root \$6.75, Plant \$3.50

AMOS KIRBY A-ID-Pr (Johnson) A large, informal purple decorative, on good stems. The color is amaranth purple, shading to pansy purple; also described as royal purple plus red. A good grower, and a worthwhile variety. Size 10×5 . **Root \$2.00, Pot Root \$1.50, Plant \$1.00**

ANNA PARRELLA B-ID-Bi (Roloff-Parrella) A medium size bicolor of dark red generously tipped clear white. Good stems hold most flowers facing side. Size $7\frac{1}{2} \times 3\frac{1}{2}$. **Root \$5.00, Plant \$2.00**

- *ARAB QUEEN A-SC-LtBl** An attractive semi cactus of coral pink, shading to yellow at the centers. Flowers are held mostly at 45 degree angle. Plants are robust growers. Size 10x5. **Root \$3.00, Plant \$1.50**
- ART LINKLETTER A-SC-Y** (Comstock) One of the very largest, yellow semi cactus varieties. Blooms face the side on good, strong stems. Plants are fairly tall and very vigorous with dark green foliage. Size 11x6. **Root \$7.50, Plant \$2.50**
- ARTHUR GODFREY A-FD-Fl** (Pittman-Dahliadel) One of the largest formal decorative, both in diameter and depth. The color is Orient red, with orange, or buff shadings, varying in color intensity during the season. Excellent stems hold most blooms facing up. A rugged grower. Size 11x6. **Root \$2.00, Pot Root \$1.50, Plant \$1.00**
- ATOMIC YELLOW A-SC-Y** (Proctor-Ruschmohr) An introduction of merit. The blooms are large and massive; the color is clear, canary yellow without tints or shadings. A good grower that requires very little fertilizer. A good bloomer that blooms freely from mid-season. Size 10x6. **Pot Root \$1.50, Plant \$1.00**
- AUTUMN BLAZE A-ID-DkBl** (Johnson) This variety is fiery red early in the season; later, it is red centered with shades of gold toward the ends of the petals, a very striking color combination. The large, deep blooms are "at home" in the big bloom classes. Size 11x6. **Root \$1.50**
- BARBARA JEAN A-C-Pk** (Schmidt-Rocky River) A very full-petaled cactus of light pink. Prime blooms show a decided tendency of the petals to break toward the side giving a pinwheel effect. Size 10x6. **Plant \$2.50**
- BAY CITY WHITE A-IC-W** (Schiell) A really big, bold, white cactus. Petals are rather wide and have good substance. Flowers are well formed, held facing side on good stems. An excellent exhibition variety. Size 11x5. **Root \$2.00, Pot Root \$1.50, Plant \$1.00**



B & B



BERTHA SHONE

B & B A-FD-L (Beals-Boyle-Rocky River) A ten inch lavender formal with good depth, a high full center and excellent substance. Stems are stiff as a rod, eight to ten inches long, holding the flowers facing the side. Plants are very rugged with coarse leathery foliage. A good root maker. Size 10x5. **Root \$2.00, Pot Root \$1.50, Plant \$1.00**

BERTHA SHONE A-IC-LtBl (Eccleston-Rocky River) A broad petaled cactus with deeply lacinated tips. Outer two thirds of the petals are a clear lavender with the center third pure white. Blooms have good substance and depth. Stems are strong, holding most flowers at a forty five degree angle. An early and profuse bloomer, as well as an excellent root-maker. A fine garden variety and a frequent show winner. Size 10x5. **Root \$2.00, Pot Root \$1.50, Plant \$1.00**

***BESSIE HARDRESS A-FD-Y** A large, well formed, formal with good depth, good stems, and good growing habits. Centers are primrose yellow shading to golden yellow which blends into chrome yellow on outer third of petals. Size 10x4½. **Root \$1.50**

BETTY BLOSSOM B-FD-LtBl (Rindfleisch-Ruschmohr) A medium size formal of straw yellow flushed phlox pink; a pleasing combination in a flower of high quality. An early blooming variety with excellent stems. Plants are vigorous with well proportioned foliage. Size 7½x4. **Root \$1.50**

BIG TOP A-SC-LtBl (Robens) A very large, light blend, semi cactus of Persian Rose blended with white and with lighter centers. Tall, and a strong grower. Size 11x5. **Root \$5.00, Pot Root \$3.50, Plant \$2.50**

BILL JACK A-SC-W (Frank's) This white semi cactus is one of the best. Plants are tall, stems long and strong, flowers are well formed with excellent depth and good substance. An ideal exhibition variety. Size 9x5. **Root \$3.00, Pot Root \$2.25, Plant \$1.50**

DAHLIA SEED

Sow dahlia seed during the month of March in flats, or flower pots, with good drainage. Soil should be porous. Place seeds on top of the soil and then cover the seeds with about a quarter inch of horticultural grade Vermiculite. Sand is a satisfactory substitute for Vermiculite, but will require more attention to keep it properly moist. Water as often as necessary to maintain moisture at the seed level. The first seedlings will appear in a few days, while others may require a month, or several weeks to come up. High germination is largely dependent upon maintaining a proper supply of moisture over the entire period.

Seedlings may be transplanted to other flats (of soil) or into flower pots after they have been up about a week.

100 seeds of large varieties (over four inches) ...	\$5.00 net
100 seeds from Miniatures (under four inches)	\$3.00 net
100 seeds from ball varieties	\$3.00 net
100 seeds from collarette type varieties	\$2.50 net

SEEDLING PLANTS

For those who do not have the facilities for growing the seedling plants (seed sown indoors March 1st to 15th), we are offering seedling plants. These plants are from the same high grade seed offered above. The plants are carefully grown and "hardened off," and are ready for the garden when received. Priced as follows:

\$2.50 net per dozen out of flats (no soil)



BLACK MONARCH



CAPITOL CITY

BLACK MONARCH A-SC-DkR (Pape-Rocky River) A very dark oxblood red, aptly described by a garden visitor as "the big misty black dahlia." A strong grower and free bloomer. Stems are long and strong holding the flower well above the plant. Blooms have a lot of substance and keep well after cutting. Size 11x5.

Root \$2.00, Pot Root \$1.50, Plant \$1.00

BLENDETTE B-IC-LtBl (Rosemary) An incurved cactus of light primrose yellow, blending to light rose-red toward the tips of the petals. Long, wiry stems hold the blooms well above fairly tall plants. A distinct novelty. Size 7x3.

Root \$1.50, Pot Root \$1.00,

***BLIJHEID B-StC-R** An excellent, orange-red straight cactus on excellent stems; one of the best in its class. Useful for exhibition and as cut-flower. From Holland. Size 7x3

Root \$1.50

BLUE HORIZON A-ID-L (Franklin) Blooms are quite large with good depth. It is a very free bloomer. The color is described as French violet. Size 9x4.

Root \$1.50

BORAM'S BEAUTY B-IC-Au (Boram-Rocky River) An autumn colored incurved cactus. Centers are light buff with the outer portion of the blooms a darker tan. Good formation and substance. Strong erect stems hold blooms side facing on tall, vigorous plants. Size 8x5.

Root \$3.00, Pot Root \$2.25, Plant \$1.50

***BRANDARIS B-FD-Fl** Notable for it's brilliant and attractive coloring of scarlet red with center half of blooms deep golden yellow. Long stems and good keeping qualities enhance it's value as a cut-flower. Size 6x2½.

Plant \$1.00

BRIDE'S BOUQUET A-FD-W (Baker-Ruschmohr) A white formal decorative with heavy substance, and good growing habits. A welcome addition to a strong class at the shows. Stems ten to twelve inches long and cane-like, holding the flower facing the side. Size 9x4.

Root \$1.00

***BRIOSO B-IC-Bi** This brilliant bicolor is a great favorite with visitors here. Bright scarlet orange, tipped white. Ideal stems for exhibition or cutting. Size 6x3. **Root \$1.50**

***BROTHER JUSTINUS B-SC-LtBl** A Belgian variety of special merit as a cut flower, and it is also suitable for exhibition. Vivid orange with lighter centers. Excellent, long stems. Profuse bloomer. Size 7x3½. **Plant \$1.00**

***BURNBRAE MEMORIES A-ID-Y** A very large Australian novelty. Informal. The color is lemon yellow throat. Size 10x5.

Root \$2.00, Plant \$1.00

CABIN BEAUTY B-SC-LtBl (Happy Cabin) A light blend of mimosa yellow, heavily flushed lilac. Husky plants slightly below medium height. Profuse bloomer. Size 7½x4. **Root \$5.00, Plant \$2.00**

CAPITOL CITY A-SC-L (Phillips-Rocky River) A large, lavender semi cactus, of good substance. Flowers have very good depth, and are mostly held facing the side on strong stems. Numerous petals give the flower a "full" appearance. Plants are free branching, and vigorous. Size 10x7. **Root \$1.50**

CARLISLE'S BEAUTY QUEEN A-SC-LtBl The outer ends of this semi cactus are a clear pink. Centers of the blooms are almost pure white. Flowers face the side on strong stems. Size 9½x4. **Plant \$1.00**

CAROLINE M. A-ID-LtBl (Moore-Rocky River) Outstanding for it's delicate beauty. Blooms are a blend of lavender, orchid, cream to lighter centers. Twisting petals are distinctively notched. A five time AMERICAN HOME Achievement Medal winner prior to introduction. Size 10x5. **Plant \$2.50**

CASCADE ORIOLE B-StC-LtBl (DeRooy-Rocky River) A strikingly colored cactus. The color is lemon yellow with the outer area of the petals overlaid spectrum red. The plants are early bloomers producing blooms in quantity thruout the season. Stems are long and thin but strong. Size 7x3½. **Root \$7.50, Rooted Cutting \$5.00, Plant \$2.50**



CAROLINE M



CASCADE ORIOLE



CERAMIC BEAUTY



CLARIAM FOREVER

CERAMIC BEAUTY A-FD-Dk R (Eccleston-Rocky River) An outstanding dark red formal. Early and prolific. Ideal stems hold the flower facing the side, or slightly up. Best when grown to no more than six canes. It was the winner of five American Home Achievement Medals the year previous to it's introduction; more than any other variety that season. Size 9x5.

Root \$3.00, Plant \$1.50

CHEADLE PARK A-SC-Pr (Eccleston-Rocky River) This is one of the best purple semi cactus varieties. The color is a very dark reddish purple with lighter purple on the reverse. Blooms are well formed with good depth and well proportioned, stiff stems. The plants are up-right growers with strong laterals. Size 9x4.

Root \$2.00, Pot Root \$1.50, Plant \$1.00

CHEROKEE BEAUTY A-ID-Pk (Ricks-Dahliadel) A large, well formed informal of a pleasing shade of begonia pink. The plants are vigorous growers and have distinctive foliage. Some early blooms may have stems a bit short. Size 10x5.

Plant \$1.50

CHEROKEE BRAVE A-ID-DkR (Ricks-Dahliadel) Years of popularity of this big oxblood red have been justly deserved. The attractive red color is one which does not fade much in hot weather. It blooms quite early, is a good grower, and has all the requisits of a good exhibition variety. Size 10x5.

Root \$1.50

CHRISLENE B-StC-LtBl (Crystal-Dahliadel) The seven inch straight cactus blooms are a lovely, light blend of Venetian pink, changing to light primrose yellow at the centers. The dainty color and exceptionally fine form coupled with it's profuse blooming trait make it a great favorite with the gardener and the exhibitor. Size 7x4.

Root \$7.50, Plant \$2.50

CLARA HOOK A-StC-Au (Wolbert-Rocky River) A large straight cactus of golden yellow, lightly suffused peach. Flowers have excellent substance. Stems are rigid. Plants tall with heavy, glossy, dark green foliage. Winner of the Derrill W. Hart Medal as a seedling; an award to the variety with the highest average score at three official American Dahlia Society Trial Grounds, all scores are required to be above 85. Size 10x5.
Root \$1.50

CLARIAM FANCY B-SC-LtBl (Wolbert-Rocky River) A semi cactus with broad lacinated petals of very good substance. The color is light yellow at the centers, shading deeper and suffused with rose on outer portions of the petals. Reverse has a deeper rose suffusion which shows on the twisting petals. Strong stems. Plants spreading in growth. Size 7½x4.
Root \$1.50, Pot Root \$1.00

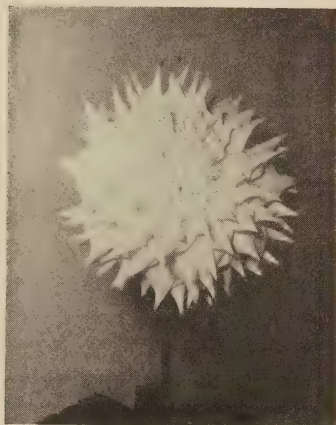
CLARIAM FOREVER A-ID-Pk (Wolbert-Rocky River) It is seldom that a dahlia attracts as much attention for its color as this one does. A clear, delicate shade of pink, without a trace of magenta, so common in "pinks." The flowers face the side on stiff, well proportioned stems. Plants are strong growers with good foliage. Informal in type, with tight centers until frost. Size 10x5.
Root \$2.00, Pot Root \$1.50, Plant \$1.00

CLARIAM GOLD A-StC-Au (Wolbert-Rocky River) A straight cactus of deep golden yellow averaging ten inches in diameter. Good, stiff stems hold flowers facing side on fairly tall plants. Flowers have good depth and good substance. Size 10x5.
Root \$2.00, Plant \$1.00

CLARIAM IDOL B-SC-Y (Wolbert-Rocky River) A well formed semi cactus of light yellow. Blooms have exceptionally good depth and substance. Strong, well proportioned stems hold most blooms at a forty five degree angle. A variety of real exhibition quality. Size 8x5.
Root \$7.50, Plant \$2.50



CLARIAM GOLD



CLARIAM IDOL



CLARIAM ROYALTY



CLARIAM PARRISH

CLARIAM KELTON A-ID-F1 (Wolbert-Rocky River) Fairly large blooms of flame red blended with yellow and with a yellow reverse. Very showy in the garden and a consistent winner at shows. Plants are tall, open growers, producing an abundance of flowers on long, strong stems. Size 9x4. **Root \$1.50**

CLARIAM LURAY B-FD-Pk (Wolbert-Slough-Rocky River) A seven to eight inch formal decorative with unusual depth, forming a ball-shaped flower. Full centered, it is a good type for exhibition. The color is a dark pink. Stems are well proportioned and strong, holding flowers facing the side. Size 7x4. **Root \$3.00, Pot Root \$2.25, Plant \$1.50**

CLARIAM PARRISH A-IC-Pk (Wolbert-Rocky River) A clear, deep shade of pink with creamy centers. This large cactus has good substance and petals are slightly incurved. An excellent exhibition variety, and a good grower. Size 10x5. **Root \$7.50, Pot Root \$5.00, Plant \$2.50**

CLARIAM ROYALTY A-StC-Pr (Wolbert-Rocky River) A large purple, straight cactus which has been grown 12x9. Reverse of the petals are lighter, showing at the center. A very full petaled flower which keeps well after cutting. Strong stems hold most of the blooms facing up. Plants are tall, open growers. It is almost unbeatable in its class, and will win many "best bloom" honors. Size 9½x6. **CLARIAM ROYALTY** received the American Home Achievement Medal at seven shows just prior to introduction. **Root \$2.00, Plant \$1.00**

CLARIAM SPLENDOR A-IC-LtBl (Wolbert-Rocky River) A blend of pastel shades; light yellow centers, suffused light, lilac-pink toward the outer portion of the petal, and with a deeper lilac line around the outside of each petal. An incurved cactus, easily grown ten to twelve inches in diameter. Good stems holding most flowers facing the side. The plants are good growers and very free branching. Size 10x5. **Root \$2.00, Plant \$1.00**

CLARIAM TIDE A-SC-Or (Wolbert-Rocky River) A bright reddish orange semi cactus. Stiff rod-like stems hold the blooms at an up-facing angle. Petals have enough substance so that blooms do not get a "bottom heavy" appearance in wet weather. Good color and formation of this one will draw the attention of visitors in your garden. Size 10x5.
Plant \$2.00

COLLECTOR'S ITEM A-SC-Fl (Keck-Stephens) A strikingly colored blend of yellow, heavily overlaid flame red. Flowers have very good substance and keep well when cut. Strong growing plants produce full centered flowers until late in the season. Size 10x4½.
Root \$1.50

COL. A. G. RUDD A-ID-DkR (Geer) Rich carmine with deeper, mahogany red at the center. It is a real factor in the red classes. Strong, tall grower. Size 10x4.
Root \$1.50

CONFIDENCE B-IC-Au (Phillips-Rocky River) A deep gold colored, incurved cactus. Substance is good and blooms keep well when cut or on plant. Stems are well suited for florist's flower or exhibition. Size 6x3½.
Root \$3.00, Pot Root \$2.25, Plant \$1.50

CONNIE CASEY B-StC-Au (Rev. Engle-Rocky River) A medium size cactus with lacinated petals. The color is a light golden buff. Size 8x4.
Root \$1.50

COSMOPOLITAN A-ID-Fl (Phillips-Rocky River) This Derrill W. Hart Medal winner for "A size" varieties has few faults, and can be depended upon for steady performance. The color is rose red, shading to gold and yellow on outer area of petals. The informal flowers are well formed, and full centered until the end. Stems are those of a good exhibition variety. Size 8x4½.
Root \$1.50, Pot Root \$1.00

***CROYDON MASTERPIECE** A-ID-Au This large, massive variety was an instant hit in this country when it first came here from Australia. It is destined to popularity for many years. The color is a deep shade of tan. High, full centered flowers are held facing up on strong stems. Size 11x6.
Plant \$1.00

CYMBIE A-SC-Pk (Brown) A large semi cactus of a pleasing shade of rose pink with a light salmon overcast. Early and profuse, it is always a bright spot in the garden. The full centered blooms have excellent depth and face the side, on good stems. Size 10x5.
Root \$3.00, Plant \$1.50

DAHLIAMUM A-ID-Au (Chemar) Among the larger varieties, this is such a strong grower that we recommend it for every beginner's garden. A deep flower of cadmium apricot with a golden sheen. Stems are strong, carrying the flowers on top. Profuse bloomer. A truly fine all-around dahlia. Size 10x5.
Root \$1.50

***D'ARCY SAINSBURY** A-FD-W This Australian variety has been one of the most popular of all white dahlias for exhibition, winning scores of awards throughout the country's leading shows. Its pure white color and free flowering habits make it a standout in the garden. The flowers are fairly large, and have all the qualities of a good dahlia. Size 9x4.
Root \$1.50

DAHLIA SOCIETY OF OHIO SHOW

Sept. 14th and 15th in the Higbee Co. Auditorium on the Public Square in Cleveland, the day following the close of the Midwest show in Pittsburgh. Plan to attend.

DEEP ORANGE BB-StC-Or (Haugh-Rocky River) A very solid little straight cactus. The persimmon orange blooms have very good substance, stems are stiff and strong. The five inch blooms have exceptional depth, often a full four inches. Blooms will face all angles except down. A desirable variety for cutflower work. Size 5x4.

Plant \$1.50

DEEP VELVET B-FD-Dk R (Baker-Ruschmohr) A formal decorative of dark carmine with an overlay of oxblood red. Petals have a deep velvety appearance. The all-around good qualities of this dahlia won for it, the Derrill W. Hart Medal for "B" size dahlias. Strong grower. Size 8x4.

Root \$2.00, Plant \$1.00

***DEUIL du ROI ALBERT B-FD-Bi** Pansy purple, tipped white, to a marked variable degree. Petals are rather narrow and long. Stems are slender and erect. Free flowering. Size 7x3½.

Root \$1.50

DOREEN E. B-StC-Pr. (Eccleston-Rocky River) A striking, deep reddish purple cactus. Face of the flower is red, the reverse purple which gives the flower its purple effect as petals quill. Petals are tightly rolled from base to tip, with tips deeply laciniated. Stems are nicely proportioned as to length and thickness. Size 8x4.

Plant \$1.00

DR. JOHN F. MORSE A-ID-Dk R (Olesen-Rocky River) A large, heavy textured, velvety dark red which does not fade in hot weather. The dark foliaged, sturdy plants have performed consistently well in it's native Iowa under conditions not conducive to best results. In addition to being a variety that will do well under adverse conditions, it can also be "forced" without detriment to the stems or blooms. Size 10x5.

Root \$1.50



Dr. John F. Morse

IMPORTED PRUNING SHEARS

We are able to supply fine imported pruning shears, manufactured in Solingen, Germany, the city famous for fine cultry. Sturdily made of high grade tool steel, we have found them very durable, as well as most satisfactory for dividing dahlia clumps. Two cutting blades in contrast to the usual one of domestic shears, eliminate bruising of tissue next to the cut. Much faster and easier to use than knives, and cuts can be made nearly as close as with knives. Ideal for all pruning purposes and a gift sure to be treasured by any gardening friend. Price \$6.50 post paid. Sold with money back guarantee if not fully satisfied after seeing them.



DUET

PLANT SHIPMENTS

Plant shipments are subject to so many conditions (see page 2) that no assurance can be given that plants will be shipped at a specified time. State the time you would like shipment. Shipment will be made as near that time as possible.

Do not ask for shipment in March or early April. The best time is mid-May to June 1st when our production is at its peak, and plants at their best. Pot roots and roots can be shipped any time, and usually right on schedule.

DUET B-FD-Bi (Scott-Rocky River) We consider this the best all-around bicolor we have grown. The color is a very dark red with the outer quarter of the petals tipped white, and very consistent in the amount of white. From a distance the flower appears to be black and white. Stems are very rigid and unbending at all times. Excellent dark foliage. Size 8x4.

Root \$5.00, Pot Root \$3.50, Plant \$2.00

EASTERN STAR A-SC-W (Pape) One of the finest originations of the late Charles F. Pape, a foremost hybridizer. The large, well formed white semi cactus blooms are held above the plants on very good stems. Blooms face the side, and have excellent substance. It is worthy of a place in any garden. Size 10x5.

Root \$3.00, Plant \$1.50

EDGAR A. GUEST B-SC-Y (Koenig) A well formed flower of sulphur yellow. Medium sized blooms are carried well above the bushes on good stems. Early and profuse. Size 8x4½.

Root \$1.50

EDNA D. A-StC-R (Diffenderffer-Loller-Rocky River) A huge straight cactus of bright rose red, which has been grown fourteen inches in diameter. A strong, tall grower with heavy, dark green, foliage. Stems are good. Petals broad and not too tightly rolled. Very impressive in the garden and on the show tables. Size 11x5.

Root \$3.00, Pot Root \$2.25, Plant \$1.50

EL DORADO B-SC- Bi (Gaylord-Dahliadel) A tannish orange semi cactus with white tips. Stems are straight and stiff. It is early and prolific. Durable dark green foliage. Size 7x3½.

Root \$5.00, Pot Root \$3.50, Plant \$2.00

EMPIRE STATE A-SC-LtBI (Warren-Ruschmohr) A large, massive flower of canary yellow, marigold orange, and light rose. Well proportioned, strong stems hold blooms facing the side. A strong grower, producing well. Size 11x5.

Plant \$1.50

ENGLE'S WHITE CHIEF A-FD-W (Engle) Large blooms with heavy, waxy, pure white petals. While some stems are a trifle short, most are of suitable length for exhibition purposes. Plants are strong growers with heavy glossy foliage. Size 10x4½.

Root \$1.00



ESQUIRE



FAIR LADY

ESQUIRE A-ID-Pr (Martin-Rocky River) This is one of the largest "purples" grown, often attaining a diameter of twelve inches, or more. The color is true purple. Blooms face side on good stems. Plants are low growing but very robust. Size 11x5. **Plant \$1.50**

FAIR LADY B-SC-LtBl (LaMotte-Rocky River) A light blend semi cactus, of mallow rose shading to creamy white centers. Stems are extra long, holding the blooms side facing. Very free bloomer holding full centers until frost. Long, slender laterals permit cutting with four to five foot stems. Excellent for cutting after most others have "popped" their centers. Tall, open grower. Size 6x3.

Root \$5.00, Pot Root \$3.50, Plant \$2.00

FAIRY QUEEN BB-SC-W (LaMotte-Rocky River) An extremely early and profuse bloomer of purest white; whiter even than our great WIND-LASSIE. Very good substance indicates its good keeping qualities. Well proportioned stems hold flowers facing side. Plants are free branching and slightly below medium height. Size 5x3.

Root \$3.00, Plant \$1.50

FAITHFUL A-SC-W (Dahliadel) A fairly large, wide petaled, semi cactus white that is easy to grow. Plants are robust with glossy green foliage and fairly tall. Well proportioned stems. Size 9x4½.

Root \$1.00

***FIGARO** A-SC-Var The color is a golden-yellow, flecked and streaked red. The flowers are very large, and most striking in appearance. Stems and plant growth are excellent. A superb exhibition flower which is outstanding in the variegated classes. Size 11x5.

Root \$2.00, Pot Root \$1.50, Plant \$1.00

FIREGLEAM B-StC-LtBl (Johnson) An attractive straight cactus of good quality. Its color is a blend of orange, nasturtium red, and canary yellow. Flowers face side on stems twelve to fifteen inches in length. Size 7x3.

Root \$1.50

FIRST LADY B-FD-Y (Comstock) A medium size formal decorative of Dresden yellow. Blooms $7\frac{1}{2}$ inches, with numerous petals which roll completely back to the stem, giving the bloom unusual depth. Early and profic with great uniformity of quality. Size $7\frac{1}{2}\times 4\frac{1}{2}$.
Root \$3.00, Plant \$1.50

FIVE STAR GENERAL A-FD-LtBl (Ramage-Ruschmohr) One of the largest formal decoratives. The color is two or three shades of pink blended with maize yellow. Long strong stems. Good grower. Size 11x5.
Root \$2.00, Pot Root \$1.50, Plant \$1.00

FLAMING SUNSET B-FD-Or (Northbrook) A medium size flower with very good substance, giving it a "trim" appearance. Stems are ideal, holding the blooms side facing. The color is an attractive, soft orange-flame, general effect is light tan. Size $8\times 3\frac{1}{2}$.
Root \$1.50

FLORENCE CHADWICK B-StC-W (Comstock) We consider this fine white cactus one of the best of its' type. Tips of the petals are lightly flushed lavender, and with the lavender more pronounced at the centers. Flowers have excellent substance, fine formation, and very good depth. Stems are in keeping with the blooms. Plants are strong growers, producing an abundance of flowers. Size 7×4 .
Plant \$1.50

FORMALITY A-ID-LtBl (Olesen-Rocky River) A peculiar shade of pink suffused autumn, which we have called a smoky pink. Flowers have thick petals, rolling back to give the bloom good depth. Plants are very strong, with dark, glossy foliage which has a bronzy sheen. Size $9\frac{1}{2}\times 5$.
Root \$1.00

***GERRIE HOEK BB-FD-Pk** This is a "darling" of the flower arrangers and a superior cut flower variety. The clear pink, waterlily-type flowers are borne in profusion on excellent stems. Size 5×2 .
Root \$1.50

GIANT BEAUTY A-ID-DkBl (Marlow-Lundgren-Rocky River) Extreme size is the big attraction of this unusual colored variety. A sort of dark rose with tints of buff, purple and with yellow at the base of the petals. Winner of the Derrill W. Hart Medal in it's introductory year. Size 11x5.
Root \$7.50, Pot Root \$5.00, Plant \$2.50



FORMALITY



GIANT BEAUTY

***GINGA A-SC-W** A real addition to the large white, semi cactus class. The blooms are held well above the foliage on slender stems. Flowers have a lot of depth and the substance is good. Very popular for exhibition. Size 10x5½. **Root \$3.00, Plant \$1.50**

GLAMOUR A-ID-Pr (Salem) Everything about the flower suggests size and vigor. It is a variety which anyone seems to be able to grow well, under almost all conditions. The very large flowers are an unusual shade of light purple with each petal edged amaranth pink. The petals roll well back giving the flower extreme depth. Size 12x7.

Root \$2.00, Pot Root \$1.50, Plant \$1.00

***GLORIE VAN HEEMSTEDDE BB-FD-Y** An attractive yellow formal decorative, with somewhat the petal formation of the popular Gerrie Hoek. The petals are a trifle more numerous than those of the latter, and it may be a trifle larger. Excellent as a cutflower, and for arrangements. Size 5½x2¼.

Root \$1.00

GOLD COIN A-IC-Au (Pape-Rocky River) A fine, gold incurved cactus that rates with other originations of this famous originator of Mrs. Hester A. Pape, Virginia B. Taggart, and Black Monarch. The large blooms have tightly rolled petals which have a decided tendency to angle sharply sidewise, when properly "finished." Very good substance, and a good keeper. Size 9½x5.

Root \$2.00, Pot Root \$1.50, Plant \$1.00

***GOLDEN AUTUMN B-C-Au** Good blooms of a pleasing light autumn shade. A rather tall, upright grower producing an abundance of fine flowers. A good cut flower. Size 6½x3.

Plant \$1.50

GOLDEN HALO B-SC-Y (Wolfe-Rocky River) An eight inch golden yellow semi cactus with proportionate depth. Good stems hold flowers facing slightly up. Plants are quite tall with lots of nice dark green foliage. An abundant producer of exhibition quality blooms, and a plant that is a credit to the garden. It is also a good root-maker. Size 8x4½.

Root \$2.00, Pot Root \$1.50, Plant \$1.00



GOLD COIN



GOLDEN HALO

SMALL FLOWERED VARIETIES

The small flowered dahlias are becoming very popular because of their general usefulness. They lend themselves nicely to effects in the landscaped garden, or in borders, furnishing a mass of color at a time when color is lacking in many gardens; blooming over a long period. As a flower for arrangements they are ideal, lasting a long time, and their great diversity of form and color permits unlimited possibilities in their arrangement. They also hold a prominent place in all dahlia shows. See pages 54 thru 59.



GOLDEN TREASURE

***GOLDEN LEADER BB-FD-Y** This fine golden yellow formal has all the characteristics of a good cut flower. An upright grower with slender canes, producing profusely from early season until late. Size $5\frac{1}{2} \times 2\frac{1}{2}$.
Root \$1.50, Pot Root \$1.00

GOLDEN SHEEN A-SC-Au (Lasch-Ruschmohr) Autumn shade of Indian yellow and scarlet. Reverse lined red. Broad petals are revolute to points and have a bronzy sheen. Ten inch stems hold large blooms mostly at a forty five degree angle. Size 10×5 .
Root \$3.00, Pot Root \$2.25, Plant \$1.50

GOLDEN TREASURE B-FD-Au (La Motte-Rocky River) A real stand-out, and a dahlia we are proud to list as one of our introductions. The general color effect of this excellently formed flower is gold, a color greatly in demand by our Cleveland florists. It is a good keeper when cut, has a nice stem, and is a very free and early bloomer. Ideal for cutting or exhibition. Plants are extremely rugged, with heavy foliage. Size 8×4 .
Root \$1.00

GOODY B-IC-L (Johnson) A really top-notch exhibition variety. This well formed cactus is an attractive, pinkish lavender color. Stems are long and strong. Plants are fairly tall; open growers. Size 8×4 .
Root \$10.00, Pot Root \$6.75, Plant \$3.50

***GRAF FOLKE BERNADOTTE A-SC-W** This large white semi cactus from Germany is one of the best to come from there. Blooms have good substance, stems are long and strong, and the plants are vigorous. Size $9 \times 4\frac{1}{2}$.
Root \$2.00, Pot Root \$1.50, Plant \$1.00

GREATER GLORY A-SC-LtBl (Salem) A very large semi cactus of rose pink, shading lighter. Excellent formation. Plants are tall, strong growers, producing an abundance of flowers thruout a long season. One of the best of it's type. Size $9\frac{1}{2} \times 4\frac{1}{2}$. **Root \$1.50**

GREAT LAKES A-ID-W (Marsh-Rocky River) An early, white informal with a demonstrated ability to win at the best shows. It is an easy to grow variety, which blooms early and profusely, holding full centers until frost. Clean, stiff stems hold the flowers well above the tall plants. An open grower with slender canes. Size 10×5 . **Plant \$1.00**

GROUCHO MARX A-SC-W (Comstock) Ivory white, semi cactus of large size. Broad petals are revolute for nearly half their length, to fine points. Stiff, strong stems hold most blooms facing at forty five degree angle. Rugged plants. Size 11×6 .

Root \$5.00, Pot Root \$3.50, Plant \$2.00

HARMONY B-IC-Pk (Wolfe-Rocky River) A camellia rose pink, incurved cactus. Petals have a tendency to twist sidewise at the tips. Strong, rigid stems hold blooms well above tall, strong growing plants. Very good substance enhances it's value for exhibition purposes and for decorative work. Size 8×4 . **Root \$3.00, Plant \$1.50**

HARRY A. BEALS A-ID-Pr (Beals-Boyle-Rocky River) A large, rugged flower on a rugged plant. The color is purplish red, with reverse of the petals streaked silver which also shows at the center of the blooms. Excellent substance. Stems are strong and of varying length; better when forced. Size 10×5 . **Plant \$2.00**

***HARRY KING A-FD-Pr** Perfection of bloom makes this purple formal one of the real stand-outs in it's class. In addition to the good form the blooms have exceptional depth. Plants are strong growers. Blooms after mid-season. Size $8 \times 4\frac{1}{2}$. **Root \$5.00, Plant \$2.00**



GREAT LAKES



HARRY A. BEALS



IMPERIAL

VISIT

Plan to attend at least one dahlia show in 1959, and visit all the dahlia gardens you know about. You will be as welcome in the other fellows gardens as he would be in yours.

HEADLIGHT A-SC-Au (Brown) A large golden-yellow with a peach suffusion on the reverse of the petals which roll, showing the reverse color. A "fluffy" appearing flower on good stems. Fairly tall grower. Size 10x5. **Root \$1.50**

HEAVENLY WHITE A-FD-W (Scott) A fairly large white, with good depth of bloom. Stems are well proportioned, and the plants are rugged growers. Size 9x5. **Root \$1.00**

***HELEN BRETT BB-StC-Or** An extremely attractive color of glistening, golden orange. Flowers of near perfection at all times. Good substance spells good keeping qualities when cut. Ideal stems. A very useful multi-purpose variety. Size 5x3. **Plant \$1.00**

HELEN HAYES A-ID-L (Comstock) The large, pinkish lavender blooms are held at a good angle, mostly facing side. Stems are strong and straight. Size 9½ 4½. **Plant \$3.50**

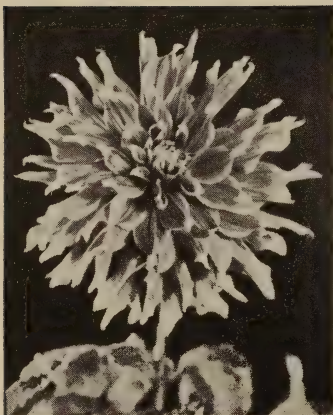
HELEN M. A-ID-DkBl (Schwanback-Brieger-Ruschmohr) An informal decorative of good depth and size. The color is an unusual dark blend of deep Persian rose, overlaid orchid purple. Blooms held at a good angle. Size 9½x5. **Root \$10.00, Plant \$3.50**

HIAWATHA A-SC-Y (Devney-Rocky River) Clear buttercup yellow on very long stems. Petals are pointed and twisting. Good substance, the flower holding its form nicely on the plant or after cutting. Plants are tall and are good growers. Does best if not overfed. Size 9x5. **Plant \$1.00**

HOOSIER MARVEL A-SC-Y (Wolfe) One of the very largest. The color is about the same shade of yellow as Lord of Autumn. Blooms have great depth. Plants are strong growers and free branching. Should be planted early for early shows. Size 11x6. **Root \$2.00, Plant \$1.00**

IDA BERNADINE B-IC-Y (Frank-Dahliadel) Full centered, well formed flowers on long slender stems. A medium shade of yellow. Size 7x3½. **Root \$2.00, Pot Root \$1.50, Plant \$1.00**

IMPERIAL A-SC-Au (Brown-Rocky River) A large, heavy bodied cactus, varying in color from apricot orange to autumn, which can be grown to twelve inches. A good grower and a free bloomer for so large a variety. Size 10½x6. **Root \$7.50, Pot Root \$5.00, Plant \$2.50**



JANE LAUSCHE



KATHLEEN

IVA JEAN (B-IC-Bi (Lundgren-Dahliadel) A bi-color cactus of soft cyclamen purple, distinctly tipped white; an unusual color combination in a bi-color. Blooms are of exhibition quality held facing side on stiff stems. Size 7x3½. **Plant \$2.50**

JANE LAUSCHE A-SC-Bi (Rocky River) Rosy mauve with about one-third of each petal tipped white. Just about all the superlatives in the dictionary have been used to describe it. Winner of many "largest bloom" and "most perfect bloom" awards. The plants are open, fast growers and produce blooms early, and in profusion until frost. A standout in the semi cactus bi-color class. Size 10x6.

Root \$2.00, Plant \$1.00

JERSEY BEAUTY B-FD-Pk (Waite) The most universally grown dahlia of the present. Eosine pink, of medium size. Our stock of this is exceptionally fine. Size 7x4. **Root \$1.00**

JERSEY DAINTY B-StC-W (Waite) Still a top-notch after many years. A really good white cactus. Size 7x4. **Root \$1.00**

***JUANITA** B-StC-DkR One of the finest dark red cactus. Nicely formed blooms with excellent substance, good stems, and high productivity enhance its value as a garden flower, in addition to its superior qualities as an exhibition sort. Plants are reliable growers, and it is a good root producer. Size 7½x4. **Root \$1.50**

JUDY G. B-StC-DkBl (Geer) A striking combination of rich ox-blood red with shadings of orange and orange-red. Well formed flowers held facing, on good stems. Size 7½x4. **Root \$2.00, Plant \$1.00**

JULIA MCKAMEY A-ID-Pk (McKamey-Hulin) A large, clear pink, with very good depth, held facing side on good stems. A good producer and a splendid keeper. Size 10x6.

Root \$2.00, Pot Root \$1.50, Plant \$1.00

KATHLEEN B-IC-Pk (Phillips-Rocky River) A very clear, clean pink without a trace of lavender. This incurved cactus is an eye catcher in the garden, because of its extremely profuse blooming habit and the lively color. A tall grower. Size 6x3.

Root \$5.00, Pot Root \$3.50, Plant \$2.00

***KELVIN A-ID-Pk** One of the greatest dahlias to come out of Australia. Blooms are large and massive, held facing up on strong stems. The color is buff heavily suffused carmine rose, giving a general color effect of peach pink. Strong plants with exceptionally coarse, broad foliage. Size 10½x6.

Root \$2.00, Pot Root \$1.50, Plant \$1.00

***KELVIN FLOODLIGHT A-FD-Y.** A big, massive yellow formal without the coarseness commonly associated with massive varieties. Somewhat on the order of Kelvin but petals have better substance. Stem is strong and nicely proportioned, holding most blooms at forty five degree angle, or slightly up. Excellent habits of growth. Size 11x6.

Plant \$2.50

KEMP'S MEMORIAL A-ID-Au (Kemp-Parrella) A very large, informal decorative of golden autumn shades. Very deep blooms are held high above the tall, rugged plants on strong stems. Late. Size 11x6

Root \$10.00, Plant \$3.50

KENTUCKY SPORTSMAN A-ID-Bi (White) An unusual color combination of three distinct colors. Lemon yellow at the center, outer petals are golden amber tipped white, and with an old rose reverse. Fairly large flowers of good exhibition qualities. Size 9½x4.

Root \$1.50

***KIDD'S CLIMAX A-FD-LtBl** Large ball-shaped flowers, cream overlaid pink and heliotrope. Long, strong stems hold flowers well above the foliage. It ranks with the best of the many fine varieties from New Zealand. Size 10x6.

Root \$1.50, Pot Root \$1.00

KING SIZE A-StC-R (Johnson) A very good, large cactus of spectrum red on ideal stems. A fine producer of numerous exhibition quality blooms, starting early in the season. Size 9x4½.

Root \$1.50

Collections

(Collections are strictly our selection)

COLLECTION A: Eight roots of poms, and/or, minatures \$3.00

COLLECTION B: Six roots of large, and/or, cutflower size,
value \$7.50 \$5.00

COLLECTION E: Eight plants of large, and/or, cutflower types,
value \$8.00 \$6.00

COLLECTION H: Twelve plants of small types (poms and minatures),
value \$7.50 \$5.00

COLLECTION I: A collection made up to buyer's specification as to amount (ten dollars and up) and as to number and type of varieties; selection of varieties to be strictly ours. Over-value of not less than 30% guaranteed.



KIRSTEN FLAGSTAD



LADY ALICE

KIRSTEN FLAGSTAD A-FD-Au (Brown-Rocky River) Outstanding in the garden, producing large, fine blooms very early, and continuously throughout the season. Plants are tall with flowers held well above heavy, glossy green foliage. The color is rich gold suffused lightly with apricot. Size $9\frac{1}{2} \times 4\frac{1}{2}$.
Root \$2.00, Plant \$1.00

LADY ALICE B-StC-Au (Kriel-Rocky River) A medium size straight cactus with deeply lacinated petals. Nearly perfect stems hold the blooms mostly side facing, and well above tall, strong growing plants. The color is deep glowing bronze with a metallic sheen. Early and profuse bloomer. Substance is fair. Centers are inclined to open a bit too early under unfavorable conditions of growth, but it is nearly always possible to cut fine exhibition blooms. Size 8x4.

Root \$2.00, Pot Root \$1.50, Plant \$1.00

LAURA B. B-SC-LtBl (Trauth-Rocky River) For sheer beauty, this is one of the leaders in this list. Base of the petals is deep golden yellow blending to a rich strawberry red on the outer nine tenths of the lacinated petals. Petals have excellent substance and the flowers keep very well when cut. Stiff stems of ideal proportions hold most of the blooms at a forty-five degree angle. An easy to grow variety with attractive leathery foliage. Size 8x6.

Root \$2.00, Pot Root \$1.50, Plant \$1.00

LAVENDER QUEEN B-FD-L (Eccleston-Rocky River) A good type formal, that is always formal. Color is an attractive clear lavender. Blooms are held facing side on long stems. Plants are fast growers and produce exhibition quality blooms very early. Size $7\frac{1}{2} \times 3\frac{1}{2}$.

Root \$5.00, Pot Root \$3.50, Plant \$2.00

LINK'S BLUE TRIUMPH A-FD-L (Link-Premier) A nicely formed formal of medium size. The color is a sort of purple-lavender, giving the blooms a suggestion of blue. Plants are slightly below the average height. Size 8x4.

Root \$1.50

LINK'S SENSATION A-SC-F1 (Link-Premier) A large deep flower of a mixture of buff and scarlet, blending to appear orange. Reverse is bittersweet-orange which shows on the face of the flower as the petals twist. Good, strong stems. Free bloomer. Foliage is leathery and insect resistant. Size $9\frac{1}{2} \times 5$. **Root \$1.50**

LLOYD GEORGE A-ID-Au (Miller-Forest) An informal of light tan with a light suffusion of old rose. Strong open grower producing quality blooms facing at forty five degree angle. Size 10×5 .

Root \$3.00, Pot Root \$2.25, Plant \$150

LOIS WALCHER B-FD-Bi (Walcher) Flowers are of medium size, true pansy purple, evenly tipped with white. We recommend this one be given good cultural methods for the best results. Plants are low to medium in height, with dark green foliage. Stems are long. Size 7×4 .

Root \$2.00, Pot Root \$1.50, Plant \$1.00

LUZON B-StC-L (Retzer) Medium size blooms of a clear, attractive shade of lavender. Stiff, erect stems hold blooms facing the side. Prolific bloomer. A strong grower. Size 7×4 .

Root \$2.00, Plant \$1.00

***LYNETTE HAWTON A-FD-LtBl.** A blend of pastel shades of pink, lavender and a touch of ivory. Well formed blooms on good stems. Good exhibition variety. Size 9×4 . **Root \$2.00, Pot Root \$1.50, Plant \$1.00**

MADONNA A-ID-W (Sarett-Ruschmohr) A large white flower with very good depth. The massive blooms are held facing up, or at a forty-five degree angle, on strong stems. Strong bushes of wide spreading growth. Late season bloomer. Size $10\frac{1}{2} \times 6$.

Root \$1.50

***MAFFIE A-SC-R** A very highly regarded dahlia. The color is an intense bright red. Tall, open grower. Size 11×6 .

Root \$2.00, Pot Root \$1.50, Plant \$1.00

***MAGNETIC B-StC-Y** (Johnson-Dahliadel) Brilliant primrose yellow, straight cactus of excellent formation. This Australian variety is an early and profuse bloomer. Stems are strong and slender, holding the flowers facing the side. Size $7\frac{1}{2} \times 3\frac{1}{2}$.

Root \$2.00, Pot Root \$1.50, Plant \$1.00



LAVENDER QUEEN



LAURA B.

MAGNIFICENT A-SC-Au (Crystal) A blend of light orange and orange chrome, the general effect being golden orange. This is a midsummer bloomer, and a strong grower. Stems are inclined to be short, especially in our fields. Size 11x5.
Root \$1.00

MARGARET DUROSS A-FD-LtBl (Fuchs-Parrella) A large informal decorative of yellow flushed scarlet, general effect being almost an orange. Cane-like stems hold blooms facing side. Plants are vigorous and productive of good blooms early and late. Size 10x5.
Root \$2.00, Pot Root \$1.50, Plant \$1.00

MARION GLENN B-SC-Pr (Miller-Dahliadel) A nicely formed purple semi cactus with laciniated petals. Wiry stems hold flowers facing side. Early and profuse. Size 7x3.
Root \$1.50

MARY ELIZABETH A-SC-R (Robens) A very large, deep flower of dark turkey red, lightly suffused yellow on edge of the petals. Plants are good growers with dark green foliage. Stems are inclined to be a bit short. Improved by growing to four canes. Size 11x6.
Root \$3.00, Pot Root \$2.25, Plant \$1.50

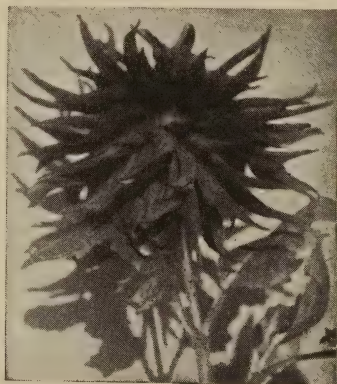
MARY JO A-SC-DkR (Beals-Boyle-Rocky River) One of the richest red colors in our list. A medium, dark red with a velvety sheen. Petals have very good substance, the plants are good growers, and it is a dahlia that every visitor to the garden stops to see. Stems are very strong and rigid, although at times a bit short on first blooms, holding the flowers facing the side. Size 10x5.
Root \$3.00, Plant \$1.50

MARY NOBLE A-FD-L One of the best of its color and type. Phlox pink to bright mauve. Blooms have size, depth and good quality. Plants vigorous. Size 10x6.
Root \$1.50

MARYLAND BEAUTY B-SC-LtBl (Phillips-Rocky River) A very prim semi cactus of light autumn shades. The seven to eight inch blooms are usually side facing on excellent stems, and held well above strong growing plants. An excellent variety for exhibition as the substance is in keeping with the well formed blooms. Size 7x4.
Root \$1.50, Pot Root \$1.00



MAUDE CRAWFORD



MARY JO



MID AMERICA



MISS MAGOO

MAUDE CRAWFORD BB-StC-Y (Haugh-Rocky River) This cactus has been the best yellow, of that type, for our cut-flower trade. It is very early and blooms profusely. Stems and laterals are ideal for cutting. The well formed flowers keep very well, and the color is an attractive lemon yellow. The fern-like foliage adds to the value of this variety as a cut flower. General quality is adequate to insure a share of winnings on the show tables. Size 5x3.

Root, \$2.00, Pot Root \$1.50, Plant \$1.00

MAUREEN CONNOLLY B-FD-Y (Comstock) A well formed flower of sulphur yellow. Petals roll back to the stem forming ball-shape blooms, which are held side facing on good stems. Size 6x3. **Root \$1.50**

MICHIGAN WHITE B-SC-W (Keiser) One of the very best of the white cut-flower dahlias. The well formed flowers seem to "pop" out over night on long, strong stems. Substance of the flower is excellent, the flower keeping well when cut. Size 6x3. **Root \$1.00**

MID AMERICA A-ID-R (Drace-Rocky River) A large bright red. The color is as nearly non-fading as any red we know. The plants are rugged, slightly below average in height, and with tough, leathery foliage. Size 10x5. **Root \$10.00, Plant \$3.50**

MISS MAGOO B-FD-Var (Harter-Rocky River) A variegated Jersey Beauty except that the pink is a little deeper, and it is streaked and speckled with spectrum red. Plant growth is similar to Jersey Beauty but the foliage is a bit heavier. Size 6x3. **Root \$7.50, Plant \$2.50**

***MISS ROSE FLETCHER BB-SC-Pk** A dainty, soft pink semi cactus of excellent form and substance. It is an early, free bloomer and holds centers well. The small flowers are ideal for arrangements and other cut flower work as well as for exhibition. Size 5x3. **Root \$1.50**

***MME ELIZABETH SAWYER B-StC-Pk** A Holland variety of rose pink. The nicely formed flowers, on long slender stems, are a strong factor on the exhibition tables. Size 8x3½. **Root \$1.50**



MRS. E. J.



MRS. HESTER A. PAPE

MOM'S PRIDE B-SC-Pk (Morgan-Parrella) A stately, medium size, semi cactus of lively luminous coral. Perfection of blooms is a notable characteristic of this variety, and the stems are ideal, holding flowers facing at a forty five degree angle. Size $7\frac{1}{2} \times 4$.

Root \$3.00, Pot Root \$2.25, Plant \$1.50

***MOORPARK B-ID-Au** (Baynes-Rocky River) Wavy petals of a lively shade of golden autumn. Stems are extra long and stiff, holding the blooms facing the side. Plants are tall, robust, and with heavy, leathery foliage. Size $8 \times 4\frac{1}{2}$.

Plant \$2.50

MRS. E. J. B-StC-LtBl (Rocky River) A bright rose pink cactus with white centers, and lightly tipped white; the white softening the general effect. Winner of the Derrill W. Hart Medal as a seeding with the highest average score of any of the many Certificate of Merit varieties we have introduced. Early and prolific, and with extremely good substance, it has proven its worth as a leading cut flower sort, as well as for exhibition. Size 7×4 .

Root \$2.00, Plant \$1.00

MRS. HESTER A. PAPE A-ID-DkR (Pape-Rocky River) Another of our introductions that scored heavily in many shows thruout the country. The color is one which is usually referred to as red, actually a reddish purple. It is a dahlia anyone can grow and grow well, and it is a dahlia which will stand "forcing." A real delight to the exhibitor. Size 10×5 .

Root \$2.00, Pot Root \$1.50, Plant \$1.00

MRS. MINNIE RING B-IC-LtBl (Far West) Long, narrow petals twist and curl to form a chrysanthemum-shaped flower. The outer petals are apple-blossom pink; inner petals a pale yellow. Size 7×4 .

Root \$1.50

***MURIEL STUART A-ID-Or** From Australia, this big, deep variety is very much in line with American standards. The color is a tannish orange. Size 11×6 .

Root \$2.00, Pot Root \$1.50, Plant \$1.00

NEW LOOK A-SC-Y (Proctor-Ruschmohr) A large Empire yellow semi cactus with good substance and form. Plants are tall, and produce an abundance of blooms thruout the season. Size 10x5.

Root \$2.00, Plant \$1.00

NEW WRINKLE A-FD-Pk (Rocky River) A fairly large pink formal with some white suffusions. Plants are tall and flowers are held proudly above the plants. It is an early bloomer. Blooms face the side on long stems. Size 9x4½.

Root \$3.00, Pot Root \$2.25, Plant \$1.50

NICK'S ORCHID B-SC-L (Koenig) One of the finest, lavender, semi cactus varieties. The color is clear and attractive, formation is good and stems ideal. Tall grower. Size 7½x4.

Root \$3.00, Pot Root \$2.25, Plant \$1.50

NICKY K. B-SC-R (Lakeside) A very outstanding, medium sized, scarlet red. Very good, strong stems, carry the flower facing side. A good grower producing an abundance of blooms. Size 8x4.

Root \$1.00

NINA GERHARDT B-ID-R (Shephart-Ruschmohr) Unusual color of spin-al red suffused chrysanthemum red, with reverse of the petals tipped gold. Some of the reverse shows on the face of the flowers. Size 8x4.

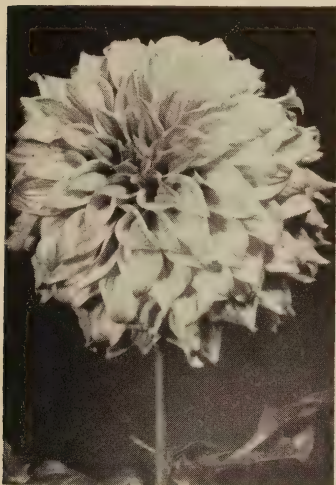
Root \$5.00, Pot Root \$3.50, Plant \$2.00

NUTLEY SUNRISE B-IC-Or (Frey-Dahliadel) A blend of dark autumn shades, burnt orange with suffusions of rose. Centers are bright apricot. Numerous rather broad petals give the blooms unusual bulk for a cactus. Size 8x4.

Root \$5.00, Pot Root \$5.00, Plant \$2.00

OAKLEIGH CHAMPION A-IC-Au (Phillips-Oakleigh) This large cactus has made a very good record on the show tables. Flowers are well formed and of good substance. The color is a blend of burnt orange and soft pink with lemon suffusions at the base. Petals are lacinated and twisted. A good grower. Size 9x4.

Root \$1.50



NEW WRINKLE

PLANT SPROUTED ROOTS

Nearly every root sent out by us at planting time is sprouted when it leaves our packing room. Should that sprout be broken off, place the root in damp lightweight material in a warm room for a week or ten days. Re-sprouting will be faster, and surer, than if planted in the garden. Much rotting in the ground will be eliminated.

Frequently sprouts become too long, in which case it is advisable to cut the sprout off two or three inches above the root, and just above a node. Normally two sprouts will develop at the topmost node, one of which may be cut off if desired.

100% A-ID-L (Beaver) Mauve pink flower of large size. Petals are broad and long. Good stems. Plants are vigorous with heavy, dark green, foliage. Size 10x4½. **Root \$1.50**

ORANGE MAJESTY A-ID-Or (Hadow-Rocky River) A richly colored variety of a clear orange shade. The large blooms have adequate depth and are held facing on rigid stems. Plants are sturdy and prolific. A real standout in the well grown garden. Size 10x5.

Root \$3.00, Pot Root \$2.25, Plant \$1.50

ORANGE SPECIAL B-ID-Or (Forest View) Well formed blooms of dark autumn with Jasper red at the centers, giving an over-all effect of orange. The medium size blooms are borne in profusion on robust plants. Good stems hold the flowers above the foliage. Size 8x4.

Root \$1.50

ORCHID QUEEN B-FD-L (Hadow-Rocky River) A well formed and delicately colored formal decorative. The outer petals are pastel mauve with those in the center almost white. Blooms face the side on long stems. Tall grower. Size 7x3½.

Root \$7.50, Pot Root \$5.00, Plant \$2.50

***ORFEO B-IC-Pr** One of the best in the purple cactus classes. Medium size flowers, well formed; good stems, and good substance. Size 7x3½.

Root \$1.50

OTTO'S THRILL A-FD-Pk (Aumuller-Ruschmohr) Camelia rose pink with edges of petals tinged canary yellow. Blooms and stems of exhibition quality. Size 9x4.

Root \$5.00, Pot Root \$3.50, Plant \$2.00

PAINT BRUSH B-FD-LtBl (Rocky River) An extremely heavy petaled formal, of striking color; centers sulphur yellow with outer half of petals heavily blushed cherry red. Primarily a garden sort. Size 7x3.

Root \$2.00, Pot Root \$1.50, Plant \$1.00



ORANGE MAJESTY



ORCHID QUEEN

PAPE'S PINK B-SC-LtBl (Pape-Rocky River) A well formed semi cactus of mallow rose with creamy centers. Ideal stems hold the flowers at a forty five degree angle. Early and free bloomer that keeps well. Plants are vigorous and wide spreading. Size 7½x4.

Root \$3.00, Pot Root \$2.25, Plant \$1.50

PATRICIA A-ID-Pk (Huey Robens) An outstanding exhibition dahlia of light rose pink. Plants are husky and spreading, producing many blooms for a dahlia of this size. Size 11x6. **Root \$2.00, Plant \$1.00**

PATRICIA SPOLLEN A-IC-Or (Pennypack) The general tone of this nine inch cactus is persimmon orange. A good all around dahlia. A reliable performer in the garden, early and profuse, with nearly all blooms of exhibition quality. Size 9x4½.

Root \$2.00, Plant \$1.00

PEACH BLEND B-FD-LtBl (Haugh-Rocky River) A perfection formal decorative in the five to six inch class. Petals roll completely back to the stem forming a ball-shaped flower. The color is an attractive peach with reddish-rose suffusion on outer portion of petals. Stems are long, straight and stiff, holding the flowers well above the tall plants. Size 6x3½.

Root \$2.00, Pot Root \$1.50, Plant \$1.00

PEGGY J. B-StC-LtBl (Beals-Boyle-Rocky River) Delicate coloring and artistic formation make this one an instant hit with all who see it. A medium size flower with tightly rolled petals which are lacinated at the tips. Centers of the flowers are white, the outer third delicately suffused lilac to light lavender. Size 7x3½.

Root \$3.00, Pot Root \$2.25, Plant \$1.50

PEPPERMINT A-FD-LtBl (Beals-Boyle-Rocky River) A large formal decorative of striking color combination. The blooms are basically white, heavily outlined with deep, cherry red, with the red showing pronouncedly at the centers. The combination of red and white being remindful of a peppermint candy stick. It will be one of the favorites in your garden. Size 9x4½.

Root \$3.00, Pot Root \$2.25, Plant \$1.50



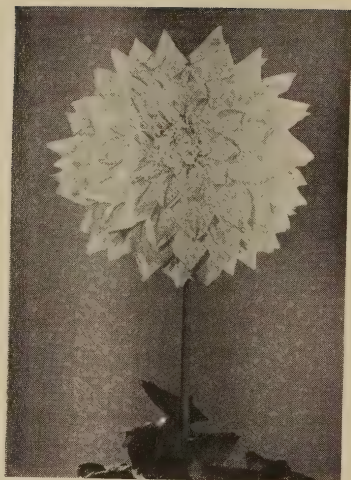
PAPE'S PINK



PEACH BLEND



PIEDMONT JEWEL



PAIRIE SUN

PIEDMONT JEWEL B-SC-L (Faust-Rocky River) A full petaled, lavender semi cactus of excellent form and exceptional depth of bloom. One of the finest in it's class for exhibition. Stiff, nicely proportioned stems hold the flowers well above rather tall plants. Size 8x5.

Root \$5.00, Pot Root \$3.50, Plant \$2.00

PILGRIM B-StC-W (Morgan-Rocky River) A white straight cactus with creamy centers. Stems and laterals are slender but rigid, holding flowers facing the side. A particularly good producer of quality blooms; one that can usually be counted upon for blooms when needed. Size 7½x4.

Root \$3.00, Plant \$1.50

***PINK GIANT A-ID-Pk** Large flowers of bright, clear, rose-pink. A great favorite with garden visitors and a fine show flower. Size 9x5.

Root \$1.50

PINK MUM B-IC-Pk (Grohall-Northbrook) A bright pink cactus with the shaggy appearance of a chrysanthemum, as the petals curl and twist. Long stems and good keeping quantities make this a good cut flower as well as one for exhibition. Size 8x4½.

Root \$1.50

PIRATE TREASURE A-ID-Au (Marsh-Rocky River) A big, massive, informal of rich autumn shades, sometimes quite heavily suffused red. Stems are long, extremely rigid, holding the flowers well above the plants. A good grower, producing blooms early. It set a record by winning ten American Home Achievement Medals as a seedling. Size 10½x7.

Plant \$1.50

POWDER PUFF A-ID-L (Barwal) A lilac to lavender sport of Sherwood's Peach with the same extreme size as the parent. Formation of blooms and plant growth are also identical to that of the parent. Size 12x6½.

Root \$1.00

PRAIRIE FIRE A-SC-Or (Marsh-Rocky River) It is seldom that a variety comes along which is a "natural," but we feel this is such a variety. This big orange semi cactus, growing up to twelve inches, and over, has color, size and depth. Strong stems hold blooms side facing to forty-five degree angle. Plants are very robust. Size 11x6.

Pot Root \$2.25, Plant \$1.50

PRAIRIE SUN A-FD-Y (Marsh-Rocky River) A yellow formal of excellent form and substance. It is a tall grower, and an early bloomer, producing an abundance of exhibition quality blooms. Stems are more than average in length, holding the flowers well above the plants. It is hard to beat in its class, and a marvelous sight in the garden. Size 9x4.

Root \$3.00, Pot Root \$2.25, Plant \$1.50

PREAS' PRIDE A-SC-Bi (Preas-Ruschmohr) A sport of "Jane Lausche." Color is orchid purple with white tips. In other respects it has all the good qualities of its parent. Size 9x4½.

Root \$3.00, Plant \$1.50

PREMIER'S WINSOME A-ID-Pk (Swezey) An early, free bloomer bearing lots of large flowers of an attractive satiny, light pink. No trace of mauve so common in "pink" dahlias. Plants are nice growers and fairly tall. A real delight in the garden. Size 10x5.

Root \$1.50

***PRES. JEAN LABORDE A-ID-L** A large, pleasing, lavender informal decorative, with broad petals which roll back evenly to form well-rounded blooms. A good exhibition sort. Plants are fast growing, of the type known as "open growers," and are tall. Stems are long and rigid. An early bloomer and a good root-maker. Size 10x5.

Root \$2.00, Pot Root \$1.50, Plant \$1.00

***PRIDE OF HOLLAND A-StC-Pk** This fine variety from Holland is one of the best straight cactus pinks. The color is a medium shade of pure pink. The well rolled petals show no inclination to incurve, and they are quite numerous, giving the bloom excellent depth. An open grower and a good producer. Size 8x4.

Pot Root \$1.50, Plant \$1.00

PRIDE OF PARKERSBURG A-SC-Y (Smith) A very large, clear yellow, semi cactus. Fine in the garden and a great exhibition variety. It is one of the tallest growers in this list and the flowers are held majestically above the tall plants. Size 11x6.

Root \$2.00, Pot Root \$1.50, Plant \$1.00

PRINCESS DIANNE A-ID-DkR (Comstock) A fairly large informal decorative; turkey red with darker oxblood red at center. Lacinated petals twist in all directions. Size 8½x4.

Root \$1.50

PURPLE MIST A-FD-Pr (Emmons) A large, well formed purple which starts blooming early and freely. A good exhibition variety. Size 9x4.

Root \$1.50

DAHLIA BLUE BOOK

The DAHLIA BLUE BOOK is sent free of charge to those who request it, but we do not continue to send it indefinitely unless we have evidence that those receiving it are actually interested. The best way to show your interest is by your patronage.

SUBSTITUTION

While we do not substitute unless given permission, we recommend that the buyer select one or more substitutes, or give us permission to substitute full value in a variety as nearly like the one ordered as possible. Such substitutes will be sent only if out of the variety ordered.



PURPLE VELVET

SEEDLING TRIALS

Our seedling trials are the most extensive of any in the country. These require a great deal of time in observation and keeping of records, so we must request that we not be asked to grow your seedling unless you intend that we introduce it, if introduction appears to be warranted. Our introductions are grown here at least one year prior to being released.

Because of the great number of varieties grown here on trial, we suggest that varieties not be sent until the originator has sufficient stock so that he can send us four or more roots, or plants, with permission for us to destroy the clumps of those which do not seem to warrant introduction.

PURPLE VELVET B-FD-Pr (Baker-Rocky River) A purple sport of Deep Velvet with the same heavy textured petals and velvety sheen. It has the same wide spread growing habits of the parent, and with the same very dark green foliage. Very useful for the exhibitor who is out to win blue ribbons, as there is not too much competition in its class. Size 8x4. **Root \$1.00**

***PYGMALION A-InC-Au** A Holland dahlia of real worth. Blooms are large. The color is an attractive orange-tan with peach-red suffusion toward centers. Plants are rugged and spreading. Size 9x4. **Root \$1.00**

***QUINN'S TIDAL WAVE A-FD-Y** A very large, broad petaled yellow of regular formation. Stems are excellent, growth very good, and it blooms well for so large a flower. An Australian introduction which made an instant hit in this country. Size 10x5. **Root \$1.50**

RANDY PRINCE A-SC-Y (Miller-Forest) A fairly large primrose yellow semi cactus with more than usual depth. Blooms face the side on tall plants. A free bloomer. Size 9½x5. **Root \$7.50, Pot Root \$5.00, Plant \$2.50**

***RAYMOND O'SULLIVAN A-FD-Pk** Coral pink with shadings of fawn. A rugged growing plant, producing good solid flowers on strong stems. Size 9x4½. **Plant \$2.00**

RED CHAMPION A-ID-R (Robens) Here is one of the largest of the informal decoratives. The color is spectrum red, blended buff with the base of the petals picric yellow. The general color effect is flame. Stems are strong holding the flower facing up. Easy to grow. Size 11x6. **Root \$2.00, Plant \$1.00**

RED GLAMOUR A-ID-R (Wolbert-Rocky River) Big and bright, this introduction always attracts a lot of attention in the garden. The color is a medium shade of red with no other tints. Flowers have great depth giving the blooms a massive appearance. Like so many of the large ones, the stems sometimes seem short in proportion to the flowers. It is a dahlia that "likes" a little forcing. Size 10x6½.

Root \$3.00, Plant \$1.50

REMEMBRANCE A-SC-W (Morgen) An unusual, shaggy, white semi cactus of large size. Some blooms lightly tinted lavender at the centers. Deeply cleft petals add character to this free blooming variety. A very good grower, and it starts blooming early. Strong stems hold the flowers facing side, or at a forty-five degree angle. It will win at the shows, but it is really tops as a garden variety. Size 10½x6.

Root \$2.00, Pot Root \$1.50, Plant \$1.00

RENEE B-StC-Pk (Marker-Gamston) A pleasing color of rich spinel pink suffused deep salmon; a color that is "just a little different." The straight cactus blooms are held facing the side. A good grower. Size 7x3½.

Root \$7.50, Plant \$2.50

***REV. PUGH A-FD-FI** An Australian variety of very striking orange-red, and of large size. Blooms have very good substance. Rigid stems hold flowers side facing and at forty five degree angle. Plants are very sturdy. Size 10x5.

Root \$2.00, Pot Root \$1.50, Plant \$1.00

REVIVAL A-StC-Pk (Simbritzki) A bright, clear, deep pink cactus of fairly large size for that type. Tall plants are good all-around performers. Blooms face the side on good stems. Size 9x4.

Root \$5.00, Plant \$2.00

ROSA LENE B-IC-L (Barrett-Rocky River) A lavender incurved cactus with unusual substance. Blooms hold their shape on the plants even in rainy weather and blooms are characteristically well formed. Stems are well proportioned and hold the blooms above the open growing plants. Size 7x3½.

Root \$5.00, Pot Root \$3.50, Plant \$2.00



RED GLAMOUR



ROSA LENE



ROYAL JESTER



SELLWOOD GLORY

ROSELYN STRAIGHT A-SC-Au (Straight-Wells-Ruschmohr) General appearance is apricot yellow shaded and streaked scarlet red; very tips of petals are lemon yellow. Fairly large blooms. Long graceful stems hold flowers well above the plants. Very early and prolific. Size 9x4.
Root \$2.00, Plant \$1.00

ROYAL JESTER A-ID-DkR (Rocky River) A very dark, blackish red informal decorative. Strong, black stems are well proportioned and hold blooms above vigorous plants. Foliage is distinctively dark green. Size 10x5.
Root \$5.00, Pot Root \$3.50, Plant \$2.00

SALLY KLEIN A-FD-Pk (Kelly-Parrella) General effect pink; described as Tyrian pink and pinard yellow with both colors showing in lines on the broad flat petals. Flowers have fine stems and good substance. A good variety for exhibition as it is a good producer of quality blooms.
Plant \$1.00

SAM HERST B-StC-Y (Pennypack) A fine-petaled cactus of light primrose yellow. Petals are deeply lacinated giving the appearance of more petals than there actually are. Strong stems are nicely proportioned. Size 8x4.
Root \$1.50

SARAH CAROLYN A-FD-L (Whittaker-Ruschmohr) Strong Canelike stems hold the bold flowers facing the side above a robust plant with tough, dark foliage. Size 9x4.
Root \$2.00, Pot Root \$1.50, Plant \$1.00

SELLWOOD GLORY B-FD-DkBl (Beyerle-Rocky River) Here is one that is distinctive. Seven to eight inch blooms of mahogany overlaid purple, suffusing to distinct white edging of each petal. It is not a bi-color. Coloration of the flower is very uniform. A formal decorative, with good keeping qualities, no open centers, and good cutting stems. Very popular with our florists as it lends itself well to unusual effects in florist work. Even the foliage is attractive. Size 7x3.
Pot Root \$2.25, Plant \$1.50

SHERWOOD'S PEACH A-ID-Au (Sherwood-Ruschmohr) Blooms have great depth and are carried facing side on cane-like stems. Plant growth is robust. Not an early bloomer but it is at its best for shows. One of the largest dahlias grown. Color is ochereous buff. Size 12x6.
Root \$1.00

***SHIRLEY WRIGHT A-ID-R** A very large rose-red with a bluish cast; bordering on the formal type, altho classed informal. Good stems, and good growing habits. Size 11x6. **Plant \$1.50**

SILVER TIPS A-SC-R (Bennett & Beckmann) Light rose-red with lacinated petals, lightly tipped silver. Silver reverse shows as the petals twist. Flowers have exceptional depth, and it is one of the first in the garden to bloom. Size 9x6. **Root \$1.50**

SON OF SATAN A-IC-R (Slocum) One of the largest and brightest of its type, intense flame red on excellent stems. Blooms up to twelve inches in diameter. Tall, open bush growth. A sensation in any garden. Size 10x5. **Root \$2.00, Plant \$1.00**

SOPHIE R. A-FD-W (Roberts-Ruschmohr) A large, white formal decorative with flowers of good substance and form. Size 9x4. **Root \$10.00, Plant \$3.50**

SOUTHERN BEAUTY BB-FD-DkBl (LaMotte-Rocky River) This is one of the most useful, as well as one of the most attractive in this list. A very well formed, formal decorative of about five inch diameter, with perfect stems, holding the flowers at proper angles. Fine for exhibition because of it's form, but probably of greater value as a cut flower because of its earliness and extreme productiveness; the plants being literally covered with blooms from early until late in the season. Blooms hold their centers well. General effect is white heavily suffused rosy purple on outer ends of petals. Size 5x3. **Root \$2.00, Pot Root \$1.50, Plant \$1.00**

SOUTHERN BELLE BB-FD-LtBl (LaMotte-Rocky River) A most distinctive novelty; white at the centers with the outer one-half to one-third deeply suffused rose red. Plants are strong, open growers. Stems are long and slender, and nodes are widely spaced. Size 6x3. **Root \$2.00, Plant \$1.00**



SOUTHERN BEAUTY

WOOD LABELS

We carry a supply of good labels, manufactured from selected Soft White Pine, at the following net prices; post paid.

Copper wired, painted tree labels, 3½x5½ at \$1.00 per hundred, or \$6.50 per carton of 1000.

Painted pot label, pointed at one end, 4x5½, at 75 cents per hundred, or \$5.00 per carton of 1000.

CLUMPS

Whole, field grown clumps, as dug, will be available of most of the varieties listed in this catalog. Clumps are sold only for fall delivery; no clumps being held later than Dec. 15th. Clump price lists are sent only to those who ordered clumps the previous fall, and to those who request it for that particular season. Requests for the price lists may be sent now.



SPECTACULAR



STORM CLOUD

SOUTHERN ROSE A-ID-Pk (Dozier) One of the best and most attractive of the large "pinks." Stems are excellent. A good bloomer. Size 10x5.
Root \$1.50

SPECTACULAR A-ID-Bi (Brown-Rocky River) An interesting informal bi-color, purple tipped and/or edged white. Extremely variable in its markings, it produces some "spectacular" effects with blooms varying from all white to all purple and every conceivable combination between. Size 8½x4.
Root \$3.00, Pot Root \$2.25, Plant \$1.50

***STANLEY B-C-DkR** A dark red cactus with tightly rolled petals. A distinctive novelty for those who like something different. Size 7x3½.
Plant \$1.50

STARDUST A-FD-Pk (Comstock) A good, clean pink, formal decorative, growing up to ten inches in diameter. Very fine stems hold the flowers facing the side. Size 8x5.
Root \$1.50

STEPHEN FOSTER A-IC-Au (Salem) This is one for the large cactus classes. Flowers are consistently ten to twelve inches in diameter. Plants are tall and very hardy; growing well under all conditions. The color of the flower is orange-buff, lightly suffused with Tyrian rose on both the face and back of petals. Size 10x5.
Root \$1.50

STOP LIGHT B-SC-DkR (Lloyd-Ruschmohr) A very sound and reliable variety. The color is carmine red, blooms uniform, and the stems are long, holding flowers facing the side. An easy to grow variety. Size 7½x4.
Root \$1.00

STORM CLOUD A-SC-DkR (Baker-Rocky River) A naturally large variety which has been grown fourteen inches in diameter. Field grown blooms sometimes attain a twelve inch diameter. The color is a dark red with occasional traces of purple. The plants are tall and wide-spreading, producing big buds that are a joy to watch opening. Size 11x5½.
Root \$5.00, Plant \$2.00

***ST. THERESE BB-StC-LtBl** Dainty in formation and coloring. The tightly rolled petals give the flower an "airy" appearance and the delicate coloring of light lilac pink with white centers, adds up to real beauty in the pastel shades. Size 5x2½. **Plant \$1.00**

SUNBURST A-ID-Y (Smith) A massive flower of deep golden yellow. A really worthwhile addition to our list. Plants are strong growers. Stems are strong. Flowers are carried well above the foliage. Size 10x7. **Plant \$1.00**

SURPRISE A-SC-Pk (Baker-Rocky River) An outstanding exhibition semi cactus. Blooms have great depth and excellent substance. The large, massive, peach colored blooms ship well and keep well. Nearly perfect stems hold flowers out of tall growing plants. Foliage medium heavy. Size 11x6. **Root \$5.00, Pot Root \$3.50, Plant \$2.00**

TAFFETA B-StC-Or (Garfield) Especially fine as a cut-flower. Bright and attractive orange color. Early and profuse bloomer on long stems. Plants are tall with slender laterals, permitting cutting for large baskets and displays. Size 5x5½. **Root \$2.00, Pot Root \$1.50, Plant \$1.00**

TALL AND HANDSOME B-FD-Pr (Emmons) Well named as it is very tall, and attractive. The color is a glistening reddish purple. Full, high centers with closely spaced petals, and good substance enhance it's value as an exhibition variety. Size 7x3½. **Root \$1.00**

THE CARDINAL A-SC-R (Baker-Ruschmohr) A nicely formed semi cactus, of bright cardinal red. Plants are tall, strong growers with blooms standing well out of the foliage on perfect stems. Winner of the Derrill W. Hart Medal in its pre-introduction year, as the large dahlia with the highest average score at three Trial Grounds. Size 9x5. **Root \$2.00, Plant \$1.00**

THE VOLUNTEER A-ID-Pr (Whittaker-Ruschmohr) A fairly large informal decorative; peony purple flushed pansy purple, and with lighter edges. The general effect is dark reddish purple. An all around rugged variety. Size 9½x5. **Root \$1.50**



SURPRISE

LOST LABELS

Lost labels can be largely avoided by attaching them to one of the roots, instead of to the stalk. Stalks shrink in storage allowing the labels to slip off.

The best, and most permanent marking for labels is India Waterproof ink, such as used by draftsmen. Use painted (or treated) labels, and apply the ink with an old fountain pen. With a little practice, one can do a very neat job, and the labels will be legible even after being buried in the ground for a season.



VAGABOND

NOTICE PLEASE

On orders of less than \$5.00, add fifty cents for packing and postage. This is in addition to special delivery, or special handling fees. Safe arrival of plants will not be guaranteed unless special delivery, or special handling fees are included in remittance. See page 2.

TIDAL WAVE (see Quinn's Tidal Wave, page 44)

TOP FLIGHT A-SC-R (Dozier) A fairly large bloom of very "neat and trim" appearance. The color is bright blood red, which does not fade even in the hottest weather. Stems are long, holding the flower facing slightly up. Late bloomer. Size 9x4. **Root \$1.50**

TOPS A-SC-Y (Dozier) A real giant of the exhibition tables. The massive blooms are a clear yellow of one shade. Stems are good. Has won many awards as the largest bloom in the show. Size 10x6.

Plant \$1.00

TWO IN ONE B-SC-DkR (Wolfe-Rocky River) Ox-blood red with outstanding cut flower qualities. One of the first to bloom in the fields and very prolific. Petals have good substance. Occasional blooms are bicolors, being tipped white. A fast grower with dark foliage and nodes well spaced. Size 6x4. **Root \$1.00**

***UCHUU A-FD-R** This is one of the very largest, formal decoratives in this list, with blooms up to twelve inches in diameter, and occasionally larger. The color is cherry red, which combined with it's large size attracts instant attention. It is a good bloomer for one of it's size. Plants are tall and robust. Size 11x5. **Root \$7.50, Plant \$2.50**

VAGABOND A-SC-R (DeRooy-Rocky River) Nicely formed semi cactus of rich velvety red. Petals have very good substance and are not readily disarranged by foul weather. Stems are on a par with its other good points. Plants are tall and extremely rugged. Mid-season to late. Very heavy root-maker. Size 9x5.

Root \$3.00, Pot Root \$2.25, Plant \$1.50

VALLEY QUEEN A-IC-DkBl (Robens) An unusual color combination of red, shades of brown, mahogany and tan, giving it a sort of "smoky" appearance. Blooms are large and of good quality. It will win consistently in it's class at shows. A good grower and good bloomer. Size 10x5. **Root \$1.50**

VAL'S DELIGHT A-SC-DkR (Veirs-Rocky River) A dark red semi cactus with light purple shades on the reverse. The reverse color shows at the center and tints the outer petals. Flowers face the side on good stems. Very early. Size 9½x5. **Plant \$1.50**

***VAL'S ST. LAMBERT B-StC-LtBl** A strikingly beautiful variety of very light pink with deeper rose-pink suffusions at the tips. The tightly rolled petals are slightly laciniated. Long stems hold flowers side facing. Early and free bloomer. Size 7x4. **Root \$2.00, Plant \$1.00**

***VERA SEYFANG A-FD-L** (Baynes-Rocky River) It is seldom that a large variety has been awarded Certificates of Merit at three Trial Grounds, thus becoming eligible for the Derrill W. Hart Medal, but this variety received the Certificate from all five of the official Trial Grounds in existence at the time. The color is a very pleasing shade of light mallow rose, with a neat array of petaloids of the same color at the base of each petal. Flowers have good depth and the petals are of heavy substance. Stems are long and strong holding flowers facing to upright. Plants are robust with thick, dark green, waxy, foliage. Size 10x6. **Root \$10.00, Pot Root \$6.75, Plant \$3.50**

VICTORY A-FD-Pk (Asther) Here is a medium size dahlia with good depth that is very formidable in the formal pink class, as well as being a very pleasing variety in the garden. The color is rose-pink with a golden suffusion. Tall plants produce many fine blooms. A fine cut flower after mid-season. Size 8x4. **Root \$1.00**

VICTORY ECLIPSE A-ID-Pk (Wolfe) The color is shrimp pink to peach pink as the bloom develops; the base of the petals and the reverse are canary yellow. A beautiful velvety sheen overlays the flower giving it an artificial appearance. Petals roll back to the stem. A clean grower and consistent in the production of quality blooms. Size 9x6. **Root \$2.00, Plant \$1.00**

VIRGINIA B. TAGGART A-FD-Pk (Pape-Rocky River) This big, pink formal is another sure-fire winner by the originator of "Mrs. Hester A. Pape." Blooms are normally about eleven inches in diameter by five and a half inches in depth. Stems are strong and erect, twelve to fourteen inches in length, holding flower at a forty-five degree angle. Blooms have good substance, holding the form well. Ideal type plants with heavy foliage and well spaced nodes. Size 11x5½. **Root \$3.00, Plant \$1.50**



VERA SEYFANG



VIRGINIA B. TAGGART



VISION



WHITE FANTASY

VIRGINIA RUTE A-SC-DkR (Siebrecht) One of the outstanding dahlias in our list. Flowers are very large, deep, velvety, dark red of neat formation. Petals are broad and rolled to a point at the tips. Plants are tall, with blooms held high above the foliage on excellent stems. Early bloomer. Also a good root-maker. Size 11x6. **Root \$1.50**

VISION A-SC-W (Brown-Rocky River) A fine white semi-cactus with good substance. Petals remain rigid even in wet weather giving the flowers a conformity suited for exhibition. The long stems are best if the plants have not been forced too much. Blooms are nearly all facing the side. Plants are above average in height. Size 9x5. **Root \$3.00, Pot Root \$2.25, Plant \$1.50**

VIVIAN H. B-ID-Or (Hadow-Rocky River) A sturdy, eight inch, orange informal which will have but little serious competition on the show table. Blooms have very good depth. The stems are extra long, holding the flowers well above tall growing plants. Size 8x4½. **Root \$5.00, Pot Root \$3.50, Plant \$2.00**

WANDA MEADE B-ID-Bi (Blamer-Parrella) Scarlet red tipped white with crinkled petals. Medium sized flowers which keep well. Very stunning in the garden as it is "loaded" with blooms from early until late season. Size 6x3. **Root \$1.50**

WHITE BEAUTY A-FD-W (Robens) One of the largest of the white formals. Tall growing plants blooming at mid-season. Stems and quality of the flower suit it for exhibition. Size 11x5. **Root \$2.00, Plant \$1.00**

WHITE FANTASY B-FD-W (Haugh-Rocky River) A heavy petaled, pure white, eight inches in diameter and of great depth. Cane-like stems hold most blooms side facing, although the one in the accompanying illustration is a top facing bloom, selected to show extreme depth of the flower. Plants are clean, fast growers, producing flowers very early and abundantly throughout the season. Size 8x5. **Root \$1.50**

WHITE WINNER B-ID-W (Wolfe) A long stemmed, full centered flower, with unusually heavy petal texture. Vigorous plants are covered with flowers from early season until frost, producing well in the hottest weather. Especially recommended as a cut flower as it is a good keeper and a good producer of both flowers and roots. Size 7x3. **Root \$1.00**

WINDLASSIE B-ID-W (Rocky River) One of the whitest, white dahlias we know. Petals are overlaid with a glistening sheen. When fully developed, this is one of the most ball-shaped flowers in this list. Classed as a "B" flower it is almost alone in the white informal class. Flowers cut when they are apparently "prime" continue to grow in water and the back petals close in tightly around the stem. In spite of its ball-shape it does not bruise easily when packed to take to show. An excellent variety that has an outstanding record of "best bloom" at shows. It is an open grower. Size 8x5. **Root \$3.00, Plant \$1.50**

***YOWU MATSUOKA A-IC-DkR** A large ox-blood red of good form which is one of the best dark red cactus. Of Japanese origin, it quickly established itself as a favorite in this country. Size 9x4.

Root \$2.00, Pot Root \$1.50, Plant \$1.00

***ZENITH B-StC-Pr** An exhibition variety of merit. Nicely formed flowers with good substance. Flowers face side on good stems. Deep reddish purple, shading lighter toward the tips of petals. Size 6x3.

Root \$2.00, Pot Root \$1.50, Plant \$1.00

ZERO B-FD-W (Rocky River) Most standard white formals of B size have short stems. Here is one that has a long stem. The white is lightly flushed lavender at centers and sometimes near tip of petals. Well formed, and good substance, but some early blooms are inclined to "long" centers, a trait that disappears as production increases. A mid-season variety that holds up well in late season when most other varieties have open centers. Tall, wide spreading plants, with slender canes, permit cutting with six foot stems. Size 8x3½. **Root \$1.50**



WINDLASSIE



ZERO

Small Flowered Dahlias

The small flowered sorts require less care and attention than the larger types. No disbudding is necessary; the smaller the flower, the better. They require less space than the large types and staking is unnecessary except for the taller growing sorts. All are selected for their free flowering traits. The varieties in the following list average twenty-four to thirty inches in height unless otherwise noted. Ordinary garden soil is preferable to "rich" soil for early and profuse blooming.

All illustrated varieties are Rocky River introductions.

MINIATURES

All dahlias which normally produce flowers that do not exceed four inches in diameter, poms excluded, are known as miniatures. The types in the miniature group are the same as those in the larger types, such as cactus, semi cactus, decorative, etc. See page 3 for type code.

	Root	Pot Root	Plant
ALICE O'NEAL A pastel pink, straight cactus with tips of petals blunt _____	\$3.00	2.25	1.50
*ANDREA'S ORANGE An attractive, orange, semi cactus that has long been a favorite _____	1.50	1.00	.75
*ANNA MARIE A flat petaled, tannish orange formal _____	.75		
AUTUMN DOT Small, autumn color formal. Good form _____	3.00	2.25	1.50
BO BO A three inch formal of yellow-buff, deeply suffused scarlet at tips of petals. Excellent for exhibition _____	.75		
CASCADE CUPID Ball-shaped formal of golden yellow. Very profuse _____	3.00		1.50
CHARLENE A fine formal of an even shade of lemon yellow. Petals are delicately notched _____	3.00	2.25	1.50
CORAL BLEND Formal, light blend of delicate shades of pink and cream. Low grower _____	.75		
*DECOY A brilliant, flame colored formal. Bright and early _____			.75
DOTTY Small, sulphur yellow formal. Ideal form _____	2.00		1.00
FAIRY An ever popular pink formal _____	.50		



ALICE O'NEIL



CASCADE CUPID



LADY ESTER



LITTLE BILL

	Root	Pot Root	Plant
* FAVOURITE Slightly large, attractively formed semi cactus with serrated petals. Orange-buff	1.50		.75
FRANNY GRACE Brilliant, rich red formal. Low grower	1.00		
FUCHSIA GEM Small, fuchsia colored, semi cactus. Low	1.00		
GENEVA CRYSTAL WHITE A popular, white semi cactus. A trifle large at times	1.00		
GYPSY KISS A real miniature formal. White overlaid lavender, with the lavender more pronounced at the centers, and with streaks and specks of purple thruout the flower	.75		
HAZEL HARPER An outstanding all-purpose, light blend, miniature semi cactus. Bright, clear pink, with centers almost white. Terrific bloomer	1.50	1.00	.75
* HELLY BOUDEWIGN Pure white, formal, with flat petals	.75		
IKE Deep blood-red formal with delicately notched petals. Somewhat large but extremely popular. Fine for cutting	.50		
JOHNNY CASEY Fairly large miniature formal, bi-color of orient red tipped white. Very consistent	1.50	1.00	.75
JOHNNY K. Ruby red, semi-cactus. Distinctive formation		1.50	1.00
JUBILANT (American) A very colorful informal of cherry red and orange. A bright spot in the garden	1.50		.75
* JUBILANT (Holland) Rosy-lilac, semi cactus on erect stems	1.00		
LADY ESTER Dark blend formal of deep rose with purple tints, shading to very light lavender at centers. Slightly large. Tall	2.00		1.00
* LILLY BELLE Formal of delicate, soft pink with lighter centers. A bit large but an extra fine cutflower	.75		
LITTLE BILL A bright yellow, straight cactus. Four inch blooms have good substance and always have a trim appearance	1.50		.75
LITTLE BLUE STAR A purple, tipped white semi cactus bi-color. Always popular		1.50	1.00
* LITTLE DIAMOND One of the best, rose pink, semi cactus. Excellent substance	1.50	1.00	.75



TIMMIE



GOLD DUST

	Root	Pot Root	Plant
LITTLE JERRY Small, purple formal. Full centered flowers on long erect stems	.75		
LITTLE JOY Bright, rose-pink, straight cactus. Small	1.50	1.00	.75
LITTLE LEMON DROP Neat, buttercup yellow formal about three inches in diameter	.75		
LITTLE LINDA White, straight cactus with excellent form. Blooms frequently over-size for exhibition	2.00	1.50	1.00
LITTLE PATTY White semi cactus with heavy waxy petals	1.00		
LITTLE RACHAEL A bright rose-pink semi cactus. Tall, strong grower. Very profuse	.75		
MABEL L. An excellent miniature formal. Autumn shades	1.50	1.00	.75
*MARKET JEWEL Bright, velvety red, semi cactus with excellent substance	1.00		
META A "fluffy" formal decorative. A blend of lavender and white with deeper lavender at centers and outer edges of petals	.75		
*MING An artistically formed, informal decorative of shades of lavender	.75		
MISS INNOCENCE A long stemmed white formal with just a shade of lilac	.75		
*MRS. STONE A semi cactus bi-color of light red, tipped ivory. A distinct novelty	1.50		.75
NANCY A very bright, red formal. A real delight	.50		
NORMA JEAN A quality straight cactus, blend of geranium pink, flushed yellow. Tall		1.50	1.00
PRINCE CHARMING An all-around good, flame colored semi cactus. Early and prolific	2.00		1.00
PRINCESS ROYAL A mallow purple, formal decorative. Very prolific. Tall	.75		
RUBY CHARM A heavy textured, velvety, ruby red, semi cactus. A leader	1.50		.75
SILVER SPRING A soft delicate, pink formal with numerous closely set petals. Blooms all within the miniature size range. A fine arrangement flower and great for exhibition	1.50	1.00	.75

	Root	Pot Root	Plant
TIMMIE A very satisfying formal of cream blending to rose violet at tips of petals. A real gem	1.00	.75	
TREASURE A dainty cactus of an even tone of Tyrian pink. The blooms have numerous petals and hold centers to the end of the season	3.00	2.25	1.50
WHITE FAWN This white formal is "an old standby." Sometimes described as a white carnation .....	.50		
WHITE MORNING A ball-shaped, white formal close to the four inch mark. A heavy producer	3.00	2.25	1.50
ZEST Formal bi-color, white tipped cardinal red. Markings are very uniform .....			.75

POMPONS

Fully double flowers, ball shaped or slightly flattened. Floral rays blunt or round at tips, and quilled, rather regular arrangement of petals, as in formal decoratives. For exhibition they must be under two inches in diameter.

	Root	Pot Root	Plant
BETTY ANN Small, soft pink with a touch of lilac. Most widely grown pink pom .....	.50		
BRASS BUTTONS Deep yellow. One of the best	1.50	1.00	.75
BRONZE BEAUTY Autumn shades of bronzy orange. Unsurpassed as a cut flower but somewhat large for exhibition. One of the most rugged growing poms .....	.50		
* CELESTE A good exhibition white pom	1.50		.75
CLARISSE Small, deep golden orange, flushed cherry red at tips of petals. A fine exhibition sort, and a popular color for the cutflower trade	1.50	1.00	.75
CLOVER A very small exhibition sort. Light blend of white, faintly tinted pink; resembling a clover blossom	1.50		.75
EDITH MUELLER Golden yellow centers, heavily flushed light red on outer half of petals .....	.75		
GIRSHAM Bright pink with distinct white centers	1.00		
GOLD DUST (Goddard-Rocky River) Tiny autumn of gold hues. One of the best for exhibition	1.50	1.00	.75
HONEY Good honey colored pom with red suffusion at outer tips of petals. A good cutter .....	.75		
ILA Ideal exhibition type, in an attractive medium shade of red	1.50	1.00	.75
LITTLE EDITH Small exhibition variety of golden yellow, with deep red on edges of the petals. Very popular ....	.75		
LITTLE MARVEL A brilliant, firey red. Fine for cutting	1.50	1.00	.75
* LITTLE MARY A very small dark red pom	1.50	1.00	.75
* LITTLE ROSE Deep rose pink with well rounded blooms			1.00
* LITTLE SNOW WHITE Fairly large pom well suited as a cut flower .....	.75		
* MARGARET WILLIAMS One of the finest exhibition poms. Small perfectly formed lilac blooms			1.00
MIMOSA Well formed, bright canary yellow	1.50		.75
MORNING MIST Large for exhibition but one of the best for cutting. White generously edged deep lavender, and with lavender showing at the centers .....	.50		
MRS. J. TELFER Excellent white for exhibition but one which bruises easily, so must be handled carefully .....			.75
REGAL Royal purple, best suited for cutting. Good substance .....	.75		
ROSEGAY A gay little pom of light rose-pink. Exhibition quality throat .....			.75
ROTHOUT Bright red of good formation, suitable for cutting or exhibition .....			.75
ROSIE A blend of lavender and rose, with lighter centers	1.00		
RUDD A dark wine red, well suited for cutting		1.00	.75
SHERRY The standard deep purple, for exhibition and cutting. Size at upper pom limit .....	.50		

	Root	Pot Root	Plant
WILLO'S VIOLET An outstanding purple for exhibition and one which can win as "best pom" at shows. Petals roll completely back to the stems, forming a perfect ball.	1.50	1.00	.75
YELLOW GEM An old favorite of light yellow. A dual purpose variety well suited for exhibition and cutting	.50		
ZONNEGOOD A small, well formed pom of deep gold	.75		

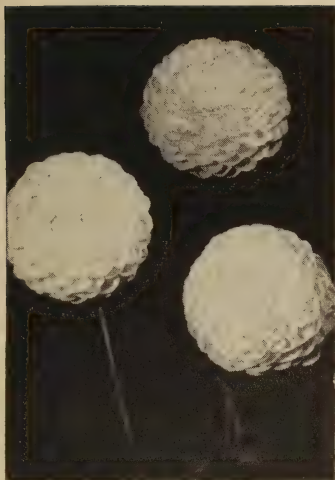
OTHER SMALL TYPES

	Root	Pot Root	Plant
BRIGHT FLASH (Rocky River) A single dahlia of bright red. Fairly tall grower. Flowers four to six inches in diameter. Hard to beat	.50		
*BISHOP OF LLANDAFF A miniature duplex (two or three rows of petals). Brilliant red with sharply contrasting centers of gold. Distinctive, dark bronzy-green foliage, which is popular in arrangements	.75		
CHRISTIANA Collarette with cherry red petals lightly striped white and with white collar	1.50		.75
COINCIDENT Striking collarette. Cherry red, edged straw yellow with primrose yellow collar	1.00		
*COMET Anemone of deep velvety crimson with center "pincushion" of the same color. 4 inch blooms look like a ball dahlia when opening			1.00
FRED SPRINGER Sometimes called "The Great Killy-Lieu" or "Bedding and Hedging Dahlia." Low, compact plants, growing twenty-four to thirty inches in height, are literally covered with brilliant, red formal decorative blooms about five inches in diameter. Not suited for cutting, but very popular as a hedge, or bedding plant. Very ornamental.	.75		
LULLABY Dwarf, tiny pink single. A row of this makes a beautiful border	.75		
RED DELIGHT A large collarette, with a single row of red petals, and a row of bright yellow petaloids around the center. Four inch blooms. Very striking	1.00		.50
SATIN WHITE Large collarette. Satiny white with white collar	.75		
TANGO CENTURY A four inch single of light autumn shades	.50		
VERA HIGGINS An anemone. Low grower, with three inch flowers consisting of a single row of fawn colored petals around a large, orange "pincushion" center. A very distinct novelty	.75		

BALLS

Having the same characteristics as poms, except size. Miniature balls are two to four inches in diameter: the true exhibition ball is over four inches in diameter.

	Root	Pot Root	Plant
ALICE J A large pink ball. Good form. Size 4x2	.75		
BOBBY S. (Schroeder-Rocky River) A fully quilled autumn colored ball with rather small petals. Long stems. Size 4x2½	1.00	.75	
BUTTERBALL (Haugh-Rocky River) A well formed light yellow ball with numerous, fully quilled petals. An easy to grow variety that has no tendency to being "temperamental." Tall, husky plants. Size 5x2½	2.00	1.50	1.00
CLARA CLEMENS A really attractive bi-color; dark red tipped white. Some solid red blooms. Size 4½x2¼.	.75		
DAINTYBALL A light blend of lavender and white. Well formed 3½ inch flowers	.50		
ED'S DELIGHT (Chandler-Rocky River) Golden yellow, suffused red at outer edge of petals. Numerous, well quilled petals. Size 4x2		1.00	.75



BUTTERBALL



ELIZABETH H.

ELIZABETH H. (Henkle-Rocky River) A dark red ball similar to Dusky in color but larger, and it is a taller grower and more prolific. Size 4x2

MOLLY LOU (Schroeder-Rocky River) The color is a clear deep lavender. Petals are roundly quilled forming a true ball. Plants are tall, open growers. Size 4x2

ORANGE GLOW Orange-gold edged red. A good ball and a most striking color. Size 4x2

SUPT. AMHRYN Well quilled lavender ball

PAT 'N DEE (Pape-Rocky River) A pure white of extremely good substance. Tall plants with heavy, waxy foliage. Size 5x2½

ROSY DAWN Golden-yellow, lightly edged red. Highly regarded for exhibition or cutting. Very popular.....

Root	Pot Root	Plant
		1.00
		1.00
.75		
.75		
2.00	1.50	1.00
.75		

BEFORE ORDERING

Be sure to read page two. Every year some lose out on replacements because they failed to follow directions.

ADVANCE PRICE LISTS

Each fall we issue a non-descriptive Advance Price List, primarily for the hundreds of visitors to our fields. We will be glad to send it to any who may wish to order before the DAHLIA BLUE BOOK comes off the press, late in January. This list is not generally mailed but will be sent to those who request it, and it must be requested each year it is wanted.

NEW INTEREST

Add a few varieties every year and you will derive greater pleasure from your garden. The same old varieties year after year become less interesting thru familiarity. The new ones need not be the scarce, recent, introductions, but get "something different" in your garden.

Cultural Hints

Although dahlias may be grown in almost any ordinary garden soil, to produce a beautiful effect in massed color with but little attention, they respond very readily to a little extra care.

Fine dahlias are the result of a number of factors, most important of which are: (1) good vigorous disease-free stock; (2) choice of varieties which naturally produce high quality blooms; (3) location of the garden; (4) proper planting; (5) cultivation; (6) intelligent fertilization and spraying; (7) pruning and disbudding; and (8) the successful winter storage of the clumps.

Factors (1) and (2) need no comment other than that varieties which we offer in this catalog are the results of several years of careful selection from the finest novelties placed on the market from all parts of the world. Each year we try many new sorts, then discard those which have no definite place in the better class gardens, and offer only the best to our customers. Our fields are carefully and frequently inspected. All inferior plants and those showing any symptoms of disease are destroyed. Our cultural methods are productive of the very finest quality roots and plants obtainable.

Selection of the location for the garden is usually quite restricted, but fortunately dahlias will do well in any type of soil and in a wide variety of climate. A good site is one that receives several hours of sunlight each day and has good drainage, so that water does not stand on the ground very long after rains. More important than the type of soil, or the location of the garden, is the condition of the soil, at planting time, and during the growing season. We believe that more failures with dahlias are due to the lack of proper conditioning of the soil than to any other single factor. This is especially regrettable since it is a factor which may be easily controlled.

The soil of the garden should be kept loose while the plants are growing, especially in the early part of the season. Light, sandy soils need the least preparation, providing they contain enough humus to hold a sufficient amount of moisture. Humus may be supplied by planting a cover crop of rye in the fall to spade under in the spring, peat moss mixed into the soil, barnyard manures, or by vegetative refuse such as lawn clippings, leaves, etc.

Heavy clay soils may be made lighter by the generous use of furnace ashes or cinders mixed with the soil of the garden, or just in the hills. Lime also tends to loosen the soil but should not be used oftener than every four or five years and never in connection with barnyard manures. A cover crop of rye also aids in the loosening or lightening of the soil. Stirring the soil frequently to a depth of five or six inches helps to maintain the soil in proper condition. It must be remembered that the tender roots of the dahlia will not reach out as readily in search of food, in hard ground, as they will in looser soil. The dahlia is a very heavy "feeder" and needs a large, efficient, root system. Also, air and water penetrate more easily into loose soil to aid in the chemical transformation of soil elements into plant food.

Spade the garden two or three weeks before planting time. Leave the surface rough until actual setting of the roots or plants. Never try to "fit" the soil when it is so wet that it sticks to the tools. Planting should not be started until the soil has started to warm up in the spring, which in the latitude of northern Ohio is about May 15th to May 20th. Planting may be continued until July 15th or later.

We suggest planting in furrows or trenches about five inches deep, running the length of the row. Place the root in the bottom of the trench and cover with two or three inches of soil. Fill in the rest of the trench as the plant grows. Rows should be at least three or preferably, four feet apart. Plants in the rows should be 24 to 36 inches apart when planting large sorts. (Small type dahlias 14 to 20 inches apart). Stakes to support the plant later, may be driven at planting time, five or six inches from the eye or sprout. In planting green plants, we suggest soaking the ball of soil on the roots in a bucket of water for several minutes before planting. This eliminates watering after planting, thereby preventing "puddling" of the soil surrounding the plants. Our plants require no shading as they are well hardened. Plants which have been en route for five or six days may be acclimated to open air conditions by setting them in the shade for a day or two after they are received. We do not recommend washing the soil off the roots before planting as is sometimes done. We have found that shallow planting of plants is conducive to better clump formation. For this reason we recommend that the ball of soil surrounding the plant in the pot be covered with no more than an inch of soil when planted in the garden.

Many failures with "GREEN PLANTS" are due to improper cultural methods at the start of the growing season. Normal growth should be the aim. It is not uncommon for the gardener to employ all methods within his knowledge to get his plants off to a fast start. A fast growth is also a soft growth which is easily injured by the heat and dry weather of mid-summer. Such injuries result in a check to the plant and a resultant hardening of the plant tissues. When the issues become hard, or woody, they lose their properties to expand, or grow. Thereafter, no greater amounts of plant food can pass up through the stalk than

was the case when the hardening took place. Growth practically ceases. When this has occurred, first class results can be obtained only by cutting the plant back to the ground and starting all over. In many cases this will be too late to obtain blooms.

Hardening may also be caused by a number of other factors. In some cases the condition may have been induced by planting too early, when the soil is too cold for normal growth. Some other factors which may cause this condition are: setting plants in the garden which have not been properly "hardened off" in cold frames, allowing the plants to dry out, excessive water, lack of cultivation, root injuries due to insects or fertilizers, as well as a number of others not so common. When growth has been normal the plant can cope with conditions which would cause a soft plant to suffer a check.

Cultivate occasionally to a depth of five or six inches in the early part of the season. Right next to the plant cultivation should not be as deep or some of the roots are likely to be cut off or injured. When the plants are in bloom and the spaces between the plants are pretty well filled with foliage no further cultivation will be necessary.

Water only in very dry weather. One thorough soaking is far better than several light sprinklings. Frequent watering brings the roots too near the surface where they are quickly injured by heat or drought. More water will be required after the plants start blooming than earlier in the season.

There are a number of elements in the soil which are needed for proper plant growth. Of these elements there are only three which are likely to be present in lesser amounts than needed by the plant. They are NITROGEN, PHOSPHORUS, and POTASH. In order to arrive at an intelligent fertilizer program we must understand the purpose of the above elements to the plant.

NITROGEN is needed for bush growth, dark green foliage, and large flowers. Plants growing in soil which is lacking in nitrogen show a yellowish cast to the leaves, low growth, failure to develop buds properly, and small flowers of poor color. Too much of this element produces a tall growth, soft plants, delays blooming, weakens stems, and reduces the keeping qualities of the root in winter storage. It will injure leaves and roots if applied directly, or too close, to them. The common sources of nitrogen are cover crops, dried blood, fish scraps, barn-yard manures and commercial fertilizers.

PHOSPHORUS is the most important from the dahlia grower's standpoint. It is essential in all plant functions. It hastens blooming, increases root development, stiffens the stems, increases the general vitality of the plant, and it overcomes the harmful effects of excessive nitrogen as well as certain other adverse soil conditions. Phosphorus is not harmful even when applied in excessive quantities. The common sources are: super-phosphate, double superphosphate, and bone meal. The latter also contains a small amount of nitrogen.

POTASH increases the general vigor of the plant, it is essential in the chemical changes occurring in the plant, and root formation is dependent upon its presence. The common sources are: muriate of potash, and sulphate of potash. Hardwood ashes are sometimes used as a source of potash but are not to be recommended owing to their variability in potassium (potash) content.

As a general thing, it is advisable to broadcast an 0-20-20 or similar formula, fertilizer over the garden about two weeks before planting. Five or six pounds per hundred square feet of space is a good application. It should be thoroughly mixed into the soil when digging as the phosphate element is not readily moved down into the soil by water action. In some instances, owing to unfavorable soil reactions, it may be advisable to concentrate this application in the hole as it is prepared for planting. In this case, mix a good handful of the fertilizer in the soil under and around the plant. Avoid having any of the fertilizer in direct contact with the roots. This latter method will often remedy the failure of plants to make good clumps or roots. 0-20-20 is a commercial fertilizer formula indicating; no nitrogen elements, 20 per cent phosphorus and 20 per cent potash.

In average garden soil it will not be advisable to apply a nitrogeous fertilizer at planting time, but if experience has proven that satisfactory growth early in the season is not possible without it, a small amount of barn-yard manure (well rotted) may be mixed with the soil at planting time. Nitrogen fertilizers are more satisfactorily used later in the season, after buds are formed, to give extra size to the blooms. A small quantity scattered around the plant, not nearer than a foot from the stalk, and watered into the soil may increase flower size. One or two more, very light, applications at intervals of a week or ten days may further increase size. Dried blood and sheep manures are commonly available sources of nitrogen, at most supply dealers. It should be noted that with the application of a nitrogen fertilizer the keeping quality of the roots is reduced. Each subsequent application further reduces this keeping property and excessive application will injure the plant, and in cases, destroy it. Also, such applications tend to reduce the vitality of the stock for the following year. It will be well for each grower to determine which is of greater importance to him; extreme size, or good keeping roots of high vitality. Many leading exhibitors sacrifice their stock for utmost size of bloom, and purchase, or grow, other stock for the following year. Others try to strike a happy medium, and still others avoid nitrogen fertilizers for "forcing" and depend on heavy disbudding and pruning for comparable results.

Regardless of which of the above plans are followed, some disbudding must be employed to bring out all the size possible in a bloom. After the buds appear it will be noted that they usually come in clusters of three. The one in the center is generally the strongest. Remove the other two and the effort that the plant would expend in producing flowers from them goes to the terminal bud which is left. The next two or three sets of branches (at each leaf below the terminal bud) may also be removed, further increasing the size of the bloom produced. Be sure, however, that at least one set of branches is left to produce the next flowers.

Many varieties have a tendency to grow straight up with a single stalk. If a bushy plant is desired pinch out the top of the plant when it is about eighteen inches tall. Other varieties may produce too many branches in which case some may be cut out. Plants which have been pinched out may be dis-budded as per instructions above.

Successful control of insects is of prime importance in most localities, owing to the direct damage they do to the plants and the indirect damage caused by the insects carrying diseases from one plant to another. The first principles of effective control are proper insecticides and thorough applications at frequent intervals.

DDT has proven so highly successful as a control for many of the insects infesting dahlias that it is now the basis of nearly all our insect control recommendations. On those insects not controlled by DDT, we recommend a material that is compatible with DDT and can be used in the same spray or dust. Whenever DDT is recommended, either a 5% dust or a spray containing 1 pound of actual DDT per hundred gallons is meant unless otherwise specified.

In the pest control program at our Columbia Station farm, we use a spray as it is somewhat more effective and the material remains effective for a somewhat longer period on the plants. Spraying at intervals of two weeks is sufficient for excellent results in controlling most pests. Dusts may need to be applied at weekly or ten day intervals. We suggest that applications be not made oftener than necessary for good control.

The efficiency of DDT is due to the fact that it is long lasting in its effectiveness against insects, and because it is not necessary that the insects be present at the time of application. Any of the insects controlled by it will be killed simply by walking across the sprayed surfaces as much as two weeks after applied. Rain does not greatly reduce the effectiveness of the material on the plants. Application may be made at any time of the day. DDT is compatible with most insecticides, except those containing lime, and may be applied at the same time in one application.

If a dust is preferred, a 5% dust can be purchased ready to use, which will do the job as well as dust of higher concentrations, and with less possibility of ill effects to plants. If a 5% dust can not be purchased in your locality, a dust of higher percentage of DDT may be reduced to 5% by adding the proper amount of talc or sulphur. Never use lime with DDT.

For those who prefer a DDT spray, use 1 to 1½ level tablespoonfuls of a 50% wettable powder to one gallon of water. Double the amount if a 25% powder is used, or reduce by one third if using a 75% powder.

DDT is not soluble in water but mixes readily to form a suspension (materials suspended in water). Since it is a suspension, it is necessary to keep the material well agitated after mixing until used. In this form (suspension), DDT is not injurious to the user and can easily be washed off the hands. However, it is well to avoid contact of the material with the skin as much as possible.

Continued use of DDT may cause immunity to it in pests which were effectively controlled by it. In that case consult your County Agricultural Extension Agent for his recommendation of one of the newer materials to use instead of DDT.

APHIDS cause a lessening of vitality by sucking plant juices. "Easily detected as they usually are found in clusters on the stems and around buds. Soft bodied insects which remain quite stationary on the plant. They may be black, red or green. Control by dusting or spraying with contact insecticides such as nicotine sulfate (Black Leaf 40), pyrethrum extracts or rotenone according to manufacturers directions. DDT is partly effective on aphids but can not be relied upon to control them completely at all times. However, the suggested materials for rapid control can be combined with DDT.

CORN BORERS drill holes into the stalk, usually at a leaf or branch. They live and grow inside the stalk, eventually enlarging their bores until a portion of the plant is so weakened that it breaks down. The adult moth of the corn borer lays it's eggs on a leaf. As the eggs hatch the larva starts moving toward the stalk eating tiny trails in the leaf surface. It is at this time, only, that control measures are effective. DDT is a very effective control. The material must be present on the plant surfaces as the eggs hatch and the larva start for the stalk. For best results it may be advisable to apply the DDT at shorter intervals during the short hatching period. Your County Agricultural Agent may be able to tell you when that period will be.

CUCUMBER BEETLES are sometimes quite serious pests of dahlias. They eat holes in the petals of the flowers, disfiguring the blooms. There are two common types of the cucumber beetle. One is the Twelve Spotted Beetle, charac-

terized by twelve black spots on the greenish wings. The other is the Striped Beetle, which has alternate black and yellow stripes on the wings. Chlordane, used as a 5% dust or as a spray according to manufacturer's instructions, has been found highly successful in their control. Cryolite is also an effective control.

CUT WORMS hide under clods or in the soil during the day and emerge at night to cut off young plants, usually at soil level. If these pests are not numerous they may be controlled by carefully searching the top inch or two of soil within a few inches of the plant and destroying the grub which is often two inches long and fleshy. Heavy infestations may be controlled by scattering poison bran mash lightly over the garden area. DDT is effective for climbing cutworms and others when they must cross sprayed or dusted surfaces.

GRASSHOPPERS need no description. Chlordane is very effective against grasshoppers, used as for Cucumber Beetles. Damage to dahlias can largely be prevented by spraying, or dusting, a wide area around the dahlia plot, thereby killing them before they get to the dahlias. No damage has been noted to dahlia foliage when this material has been applied to plants, and when it is not practical to treat adjoining areas, the spraying of the plants will satisfactorily eliminate the grasshoppers.

JAPANESE BEETLES which are very destructive to blooms and their presence readily detected, can be controlled by DDT sprays. Treating the soil, in which the adult beetles lay their eggs, with DDT will destroy the grubs before they emerge from the ground in the spring. Five pounds of a 10% DDT per 1000 square feet is the usual recommendation. Lawns thus treated are not harmed.

LEAF EATING INSECTS AND CATERPILLARS whose presence is evident by their eating of foliage, readily controlled by spraying or dusting with stomach poisons such as arsenicals. DDT also seems to control, either as a spray or dust.

LEAF HOPPERS are small greenish-yellow, flying insects which are very active in warm weather. Disturbing the plant will cause them to fly rapidly away and they can best be detected in this way. They are usually found on the under sides of the leaves sucking the plant juices, causing the edges of the leaves to turn yellow, eventually browning and destroying entire leaves at the bottom of the plants. Previous controls have not been very effective unless applied every two or three days. DDT will control them almost 100%.

RED SPIDER MITE, or simply red spider, are very small black and white to brownish insects, nearly always found on under sides of the leaves. A magnifying glass is necessary to see these tiny insects but their damage is apparent as browning of the lower, and to lesser degree, the upper surfaces of foliage. Under sides of the leaves usually appear to have "rusty" areas and a sort of silky appearance. In the past they have not been serious pests of the dahlia except in isolated cases. However, if DDT is used as a control for other insects, it is likely that red spider mite will be very prevalent and cause much damage if not promptly controlled. DDT kills the predators or parasites which normally feed on the mites.

Parathion has proven very effective in the control of red spider mite when used at the rate of one half pound of 15% wettable powder to 100 gallons of water. If a dust is preferred, a 1% dust will give excellent results. This can be made by adding fourteen pounds of dusting talc to one pound of the 15% powder. Aside from the precautions needed to prevent contamination of the skin and clothing of the operator, it is close to ideal. No foliage burn or injury to blooms has been observed. Parathion may be used in DDT sprays or dusts, but should not be used oftener than necessary to keep red spider under control.

Malathion (Malathon), used according to manufacturer's directions, has been found to be fully as effective in the control of red spider as Parathion in tests by Dr. R. B. Neiswander of the Ohio Experiment Station. Dr. Neiswander has been conducting tests with a number of miticides, on dahlias, for the past several years. Malathion is far less dangerous than Parathion to use, altho closely related, and can be used by the home gardener with comparative safety. We suggest those who have hesitated to use Parathion, because of its toxic properties to humans, try Malathion.

Other materials are becoming available from time to time, some of which may do your job better than the materials recommended, so it is well to keep abreast of developments.

TARNISHED PLANT BUGS are small plant bugs about a quarter of an inch long, brown mottled with shades of red and yellow. They are seldom seen on the plants as they fly away at the slightest disturbance. The bugs puncture the stalk, stems and, buds causing small black spots. Growth of stung part is severely checked, causing a shortening between nodes of the plant, shortening of stems and causing buds to open one-sided or to fail to open at all. Badly infested plants are short, very bushy and never produce presentable blooms. DDT has proven highly effective in the control of this troublesome pest.

THRIPS are very small, light greenish-yellow to dark brown insects which may be found by close examination of unfolded leaf tips and among petals of the flowers. A magnifying glass will aid in finding them as they are almost invisible to the naked eye. They cause malformed, dark spotted and blistered appearance of the leaves and often result in stunting of the plants. They are easily controlled with DDT.

DISEASES rob the plants of vitality, and in the case of some diseases, eventually destroy the plants. Control methods require destruction of all infected plants as the symptoms become apparent. Control of insects prevent spread.

MILDEW, common in the fall, is well-known. Control by dusting the under side of lower leaves with dusting sulphur, about Sept. 1st. One application will suffice for the season.

After the frost has destroyed the plants in the fall cut the stalk off at the ground. An ordinary saw is fine for this. If possible leave the clump in the ground for a week or ten days before digging. A long tined fork is best for digging the clumps. Be careful not to break or even strain the necks of the tubers. One person, with a fork, on each side of the clump to be dug can lift the clump out with less damage. Do not leave the clumps exposed to the sun or wind for more than a few minutes. If the clumps are too moist to store at once dry them off a bit in the shade or basement. Cut the stalk off to within a couple of inches of the crown. This helps to prevent stem rot later.

Winter storage of clumps offers a problem for which it is difficult to make specific recommendations. No method is universally satisfactory. It is often necessary to try several methods before hitting upon one which fits your particular conditions. For that reason we will outline a few of the ones which have proven to be among the most successful.

(1) Most primitive, but very good, is the digging of the clump with as much soil adhering as possible. The clump in the soil is stored in a cool part of the basement or fruit cellar, usually with some additional cover. If roots starts to shrivel, a little water may be added to the soil.

(2) Clumps are placed right side up in a single layer on the floor, or specially made frames, and soil filled in around them leaving the crown and stalk exposed. Enough water is added from time to time to keep the soil moist enough for growth.

(3) Clumps may be cleaned by washing and packed in boxes or barrels with some packing medium to fill in the spaces between the roots. Such materials as sand, ashes, peat moss, shavings, sawdust, leaves and like materials have been used for this purpose for many years. However, since the recent development of expanded mica, sold under such trade names as Terralite, Agrilite, Vermiculite, etc., it has been found that this material is far superior to any of the others. It is sterile and its properties for absorbing and holding excess moisture tends to maintain a nearly ideal condition around the roots. We are recommending this as a starting method for beginners.

(4) If large quantities of clumps are being stored, they may be packed tightly together in barrels or boxes without being washed and the container tightly covered with several layers of newspaper. No packing medium is used in this case, the close packing of the clumps tending to prevent excessive evaporation.

(5) Polyethelene bags, such as used in packaging fruits and vegetables, have proven very good for storage of roots. The clumps may be divided in the fall and the roots placed in the bags, with or without some medium such as vermiculite.

There are two schools of thought in regard to proper preparation of the clumps prior to packing away. One favors a thorough drying of the clumps before they are put away. The other prefers packing the clumps immediately after digging unless they are extremely wet. We believe in the latter method, which has been successful for us, because it more nearly simulates conditions of the wild state of the dahlia plant where it remains in the ground all year around. Method No. 2, above probably comes closest to the native state of wintering, and were it not for the space needed for it, and "housing" of so much soil, it would be nearest ideal.

Regardless of method used for storing, it is very important that an examination of the clumps be made about once a month during the storage period. If it is found that rot or mold has set in, greater air circulation should be provided. If roots are shrivelling it may be necessary to add a little moisture and give the containers more covering.

Ideal storage temperatures are from forty to forty-five degrees, although no noticeable harm occurs at temperatures down to just above freezing and up to sixty-five or seventy degrees. Proper humidity of the air in the storage room is an aid to good results; it being advisable in some cases to place a pail or tub of water in the storage room. In other cases it will be advisable to provide for additional circulation or drying of the air. Experience and observation will eventually determine a successful method for your conditions.

The clumps may be divided at any time but it is best to wait until the eyes or sprouts show distinctly. Never plant the entire clump. For best results divide it so that there is but one sprout to each division. Usually good clumps will average four or more divisions.

We will be glad to answer any further questions regarding these or any other phases of dahlia culture. **OUR SERVICE DOES NOT END WITH THE SALE.**

